ESTIMATION OF THE COST OF PRODUCTION OF CROPS

Report on the Pilot Scheme for the Estimation of the Cost of Production of Cotton and Rotation Crops in Akola District, Madhya Pradesh, 1952-53,

By

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CONTENTS.

	PAGES
PREFACE	
I – Introduction	1
II – The pilot scheme	
(a) General principles	3
(b) The location and plan of the scheme and method of field work.	4
III – The method of analysis of the data.	7
IV – Results:	
(a) Some Common background data	9
(i) The villages	9
(ii) The holdings	10
(iii) The cost of bullock labour	11
(b) Cotton	12
(c) Jowar	16
(d) Groundnut	19
(e) Comparison of the requirements for the cultivation of the three crops. ..	21
V – Planning of future enquiries	22
VI – Summary	27
Appendix I – Proformas	68
,, II – Calculation of the cost of maintenance of bullocks.	83
,, III – Tables 1 to 12-Basic data.	85
,, IV – Areas of fields.	183

PREFACE.

This report embodies the results of an enquiry into the cost of production of certain crops, which was the first of its kind in India in that the holdings and the fields selected for the enquiry formed a truly representative sample of the agricultural area concerned, having been selected randomly. In consequence not only are the results obtained representative of conditions prevalent in the Akola district of Madhya Pradesh in which the enquiry was located but it is also possible to determine the margin of error of these estimates. The district and the crops chosen, namely, cotton, jowar and groundnut, are typical of a large agricultural area in peninsular India and it is therefore hoped that the results of the present investigation will provide a useful basis for an efficient planning of large scale surveys with similar objectives.

The project was a co-operative enterprise and its success is largely due to the enthusiastic participation of the Agricultural Department of Madhya Pradesh. The Director of Agriculture, Dr. R. J. Kalamkar, placed an experienced officer, Shri W.G. Chaudhari, in charge of the field work, made a selected staff of fieldmen and supervisors available for the scheme and provided all other facilities for its efficient working. Shri D.Y. Lele, Statistician, I.C.A.R. did a considerable amount of preparatory work at the stage of commencement and organisation of the fieldwork. As happens frequently in a complex investigation of a pilot character, the processing of the data collected and their statistical analysis proved more arduous than was anticipated but the statistical staff carried out their heavy task satisfactorily. It is necessary to mention in particular the very good work done by Shri S.D. Bokil, who was entrusted with the responsibility for this part of the project.

The investigation was made possible by the financial assistance granted by the Indian Council of Agricultural Research, the Indian Central Cotton Committee and the Indian Central Oilseeds Committee.

New Delhi,
July, 1954.

V. G. PANSE.

1. INTRODUCTION

Farm costing or the study of the economics of farming is a relatively new subject; but it has made considerable progress in U. S. A. and Europe. In India, maintenance of any kind of farm accounts is unknown to the ordinary farmer, such accounts being confined to government farms. Data on cost of cultivation have also been collected by revenue authorities in connection with land revenue settlement in various temporarily settled provinces. A critical study of the economics of farm business may, however, be said to have commenced with the investigations by the Punjab Board of Economic Enquiry about 1923 and a little later in Bombay. The Gokhale Institute of Economics and Politics at Poona has been carrying out detailed surveys in this field and has made a considerable contribution in arousing a wider interest in this subject. While the overall economic returns from farm business was the general objective of such inquiries in the earlier years, economics of cultivation of individual crops, specially cash crops like cotton and sugarcane, became the centre of interest in years just preceding the Second World War, as likely to provide basic data for the promotion of development measures for making particular crops more remunerative. An extensive enquiry sponsored jointly by the Indian (then Imperial) Council of Agricultural Research and Indian Central Cotton Committee was carried out with this aim in view in several sugarcane and cotton growing regions of India during the years 1933-34 to 1935-36.*

There is a considerable divergence of opinion among the economists on the feasibility of estimating costs of production of individual crops and on the use which can be made of the results. Thus, J. S. King** holds the view that the individual farm product has no final cost that is determinable independently of the cost of other products and that the individual products are not the real natural divisions upon which the classification of farm expenses rests. This is an extreme view and there is no reason why production of individual commodities on the farm cannot be costed with suitable conventions for apportioning over-head expenses among the individual commodities. Besides, such a view would render the study of farm cost of little practical value in a country like India where the main interest of these investigations is centred around the possibility of linking policies of price fixation and State assistance to farmers engaged in the production of particular crops with the cost of production of these crops individually and in relation to one another. Some economists are opposed to the idea of making estimates of cost of production a basis for fixation of prices. It is all the same a fact that farmers, trade and administrators are equally keen to secure reliable information on the cost of production of different crops as being closely relevant in any discussion of the prices of these commodities. Information about the cost of production of different crops grown in rotation in a tract is valuable for other reasons also. This knowledge would enable farmers to allocate their resources more efficiently among the different crops and would assist a more rational planning of crop production in the tract. The genesis of the present project itself was in the need for increasing the area and production of cotton in India which became pressing consequent upon the partition of the country. It was realised that any expansion of cotton acreage would naturally depend upon the gain to the farmer from cotton cultivation compared to that obtainable from other crops which compete with cotton. In order, therefore, to secure information on the basic requirements for the production of cotton and its rotation crops, the Indian Central Cotton Committee decided in February 1949 that the requisite data should be collected through a properly planned enquiry.

An enquiry with these aims must be so organised that the results, whether estimates of physical quantities related to crop production or their money equivalents, are representative and possess a low margin of error. Representativeness is essential in order that the results should be applicable to the entire tract or to the whole range of conditions to which they are intended to refer. The margin of error of a numerical estimate is an index of the precision with which it is determined. To be useful in practice, the numerical estimates must have a sufficiently narrow margin of error. To ensure these characteristics, namely representativeness and precision, the

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*Report on the cost of production of crops in the principal sugarcane and cotton tracts in India, Manager of Publications, Delhi (1939).

** Cost accounting applied to agriculture, Oxford University Press, 1927.

estimates must be based on measurements made on an adequately large sample of units selected randomly out of the totality of units in the population, in the present case, out of all the holdings or fields growing the crop in the tract for which the results are required. These considerations need to be stressed, as in many economic enquiries their importance does not seem to be fully realised and reliability of the results in the sense stated above is frequently sacrificed to paying too much attention to detail in studying a small number of deliberately chosen cases. Elaborate socio-economic studies of a single or of a few so-called typical villages that are often carried out illustrate this point. Interesting as these studies are, it may be asked: can the results be applied with confidence to the entire tract to which these villages belong ? Are the numerical estimates accurate enough for practical use so that any quantities calculated from them do not suffer from an unduly large margin of error? For many economic enquiries answers to these questions would be negative and this detracts much from the value of these projects. Even in the large scale investigation on the cost of production of crops in cotton and sugarcane regions referred to above, the results are based on data collected in only half a dozen villages chosen to represent an entire tract comprising of several districts or even an entire State. For example, the cotton growing region of the Berar plains in Madhya Pradesh comprising of three districts (Akola, Amraoti, Yeotmal) was represented by six villages and both the villages as well as the holdings for study were selected deliberately. It is observed that the holdings selected for the enquiry in this tract were mainly concentrated within the size group 10-30 acres, two thirds of the selected holdings falling within this group. This does not correspond to their proportion in the population since as will be seen later from the size distribution of holdings selected for the present project in Akola district, only about one-third of the holdings would appear to belong to this group. The effect of such disturbances on the representative character of the results is obvious.

The contention that there is a large variation in the cost of production of a crop from field to field or from holding to holding does not constitute an objection to the random selection of fields or holdings for study, but rather supports it, as this method alone can give estimates of average values and of variation among individual units that are truly representative of the population. The problem of large variation cannot be solved by selecting units for study within an artificially imposed narrow limit, but by selecting a sufficiently large sample so that separate estimates can be obtained if necessary for different categories of units, e.g. for holdings in different subdivisions of the tract, in different size groups, etc.

Another important factor affecting the reliability of cost of production data is the method by which these data are collected. The so-called "survey" method which is commonly employed in America and Europe is not applicable to conditions in India at least at present. The Indian farmer is incapable of filling in questionnaires mailed to him. Even if an investigator visits him periodically with a questionnaire, the farmer whould not be able to supply him reliable information on many matters partly because of ignorance of quantitative data connected with the farming operations and partly because of a subtle resistance to giving away factual information to an outsider owing to various fears and suspicion. This is not to say that the farmer refuses to provide information or expresses any resentment at being questioned. On the contrary, he generally gives replies, that appear plausible, to all kinds of questions that might be put to him and the unsuspecting investigator, unless he is familiar with the local conditions and has a critical knowledge about the field of enquiry, would go away satisfied at having secured full information, much of which may in reality be of poor reliability and would lead to highly biased results. Results of even relatively simple enquiries following this approach such as those on the acreage and production of crop have given untenable results. It is a common experience of research workers in the field of agricultural statistics that the farmer generally does not even know the precise area of the land that he holds or cultivates. Considering that an enquiry into the cost of production of crops is far more complex and extends over a long duration and considering also that the sample of farmers selected randomly in order to be representative would necessarily include mostly illiterate and conservative or backward farmers, it is essential that the data should be collected by investigators through direct observation without much burden of providing information falling upon the farmer. It will thus be the method of cost accounting and the investigator himself must maintain the day-to-day accounts. This requires that the investigator should be in continuous contact with the farmer and his operations and must inspire his confidence. He can do

so only if he stays in the village, is familiar with the local conditions and knows local agricultural practices well. This means employment of an adequate staff of whole time field enumerators which would make the investigation far more costly than it would be, were it possible to rely on the alternative method of a periodical enquiry with the aid of a questionnaire. Although some simplification and economy is introduced in the procedures under the former approach consequent to the limitation of the scope of the investigation to specific crops instead of extending it to the over-all returns from the entire farm business, the fact remains that enquiries into the cost of production of agricultural commodities and other aspects of rural economy would continue to be heavily costly as long as reliance for the bulk of the primary data must be placed on direct observation and recording by trained investigators.

II—THE PILOT SCHEME.

(a) General Principles

The present project which was of a pilot character incorporated the two principles described above, in that the holdings and fields sampled for study were selected randomly in order to ensure representativeness of the results and the method of enquiry was that of cost accounting through a whole time staff of field enumerators recruited from the Agriculture Department and stationed locally throughout the period of the enquiry. The design of the project was scrutinized by a committee consisting of Mr. W.R. Natu, Dr. V.G. Panse, Dr. V. K. R. V. Rao and Dr. P.V. Sukhatme. The following important points were taken into account in finalising this design:

(i) The problem of estimating the cost of production of a crop may be regarded as consisting of two rather distinct phases. In the first place, certain materials like seed, manure etc. and human and bullock labour are required for producing the crop. These physical quantities are basic or fundamental in the sense that they are relatively stable features of different crops as long as methods of cultivation remain unchanged. They represent the demand made by different crops on the farmer's resources. Conversion of these quantities into money value is the second phase. The money equivalent is a convenient index for comparing the cost of production of different crops at any given time. Once the quantities of materials and labour are determined with sufficient precision, it would only be necessary to ascertain the conversion factors by suitable enquiries regarding the prevailing rates of wages and of materials in order to calculate the cost of production of a crop at any particular time.

(ii) In studying the cost of production of a crop, the relevant unit for observation is the field on which the crop is grown and the main part of the field work consists of maintaining an account of everything, by way of human and bullock labour and materials like seed and manure, that enters the field for the purpose of producing the crop. The essential objective of the project is to study the variation in these items from field to field and crop to crop. Fields for study can be selected individually or in clusters as farm holdings. While the former is statistically more efficient, the latter is expected to facilitate the field work since it is then necessary to contact a relatively smaller number of farmers for a given number of fields. This is likely to improve the reliability of the data collected and reduce the cost of field work. It is therefore desirable to compare the relative suitability of both types of units, namely individual fields and holdings, at the pilot stage.

(iii) All human labour, family as well as hired, employed on different field operations will be evaluated at prevailing rates of wages.

(iv) If the principle of evaluating human labour could be extended to bullock labour also, it would introduce very considerable simplification in the field work. Since, however, most of the bullock labour is owned by the farmer in the tract in which the pilot enquiry is projected, this method would not be applicable and is liable to inflate the cost of cultivation, as the rates of hire charged in the few cases where bullocks are actually hired for cultivation would include a margin to provide the bullock owner some profit over and above the cost of maintenance of the animals. This necessitates the estimation of the cost of bullock labour by obtaining data on the cost of

their maintenance i.e. on the cost of feed, grazing, depreciation etc. and on the total amount of work done by the animals during the year. A further complication arises from the fact that the farmer usually maintains a few milch cattle and young stock in addition to working bullocks. He houses, feeds and grazes them together. To make a realistic apportionment of the net cost incurred between working bullocks and other animals consequently presents a problem which is sought to be solved here by a mathematical approach. Evaluation of bullock labour by adopting this approach is described in a later section and in Appendix II.

(v) Information on rents and other taxes paid by the farmer and the cost of up-keep of farm implements and depreciation on them should be collected as factors contributing to the cost of production of crops.

(vi) In order that the cost of production of a crop may be calculated per unit weight (usually per maund) of the produce as well as on per acre basis, it is necessary to determine average yield per acre of a crop by conducting sample crop cutting in randomly selected fields simultaneously with the cost of production enquiry. Experience shows that reliable estimates of production cannot be secured by inquiring with the farmers who generally under-state the yield.

The objects of the pilot investigation are (a) to determine the physical quantities such as human and bullock labour and materials required for producing a particular crop, (b) to estimate the money equivalents of these quantities and (c) to obtain data for providing technical guidance in planning efficient large scale enquiries for the estimation of the cost of production of crops.

(b) The Location and Plan of the Scheme and Method of Field Work.

The project was located in Akola district of Berar in Madhya Pradesh which forms an important section of the cotton tract in peninsular India in respect of soil, climate and crop rotation practices. It may be recalled that the first pilot survey for the estimation of cotton yield by crop cutting based on the method of random sampling was also conducted in this district in 1942-43 for the same reason. Cotton and jowar are the main rotation crops in this tract. In recent years, ground-nut has found favour as a competing cash crop and has replaced cotton to an appreciable extent. It was therefore agreed that data should be collected in respect of the requirements for the production of the three crops, cotton, jowar and groundnut. Inclusion of groundnut in the scheme was also intended to meet the need of the Indian Central Oilseeds Committee which had recommended the collection of cost of production data on this crop for its guidance. The cost of the scheme was therefore shared by the Indian Council of Agricultural Research, the Indian Central Cotton Committee and the Indian Central Oilseeds Committee.

The geographical area of Akola district is 4093 square miles and there are 6 tehsils, each of which was treated as a stratum for the present enquiry. From each tehsil 5 villages were selected randomly out of a list of all villages in the tehsil making a total of 30 villages in the whole district in which the enquiry was conducted. The names and locations of these villages are shown in the map (Fig. 1). Two types of sampling unit were selected within each village: a field (survey number) and a holding.

For selection of fields, three complete lists of fields in the village survey-numberwise, in which cotton, jowar or groundnut was proposed to be grown by the farmer in the 1952-53 season, were prepared with the help of the patwari. The farmer normally decides which crop to grow in a field when he begins summer cultivation after the harvest of the previous crop and consequently the preparation of these lists was not difficult. Two fields were randomly selected from each of these lists and an extra field, similarly selected, was kept in reserve in case the farmer changed his mind at the time of sowing. This last field was, therefore, kept under observation along with other two until the crop was sown. It happened that in eight of the villages selected no groundnut crop was grown owing to the peculiar agricultural conditions of the locality and there the enquiry was confined to cotton and jowar. Where even one field growing groundnut was available it was selected for observation. In addition to these individual fields, two complete

FIG. 1.

MAP OF AKOLA DISTRICT
SHOWING VILLAGES SELECTED FOR PILOT SURVEY FOR ESTIMATING COST OF PRODUCTION OF COTTON AND ROTATION CROPS.
MARODI
JAINPUR PIMRI
AKOT
MAHMADABAD
SAWARGAON
PANCHAGAWHAN
LOTHKHED
NAGAD
VAIRAT RAJAPUR
KAULKHED
KHANDALA
SULTANPUR
MURTIZAPUR
AKOLA
BALAPUR
MASA
MANKI
REDHWA
LODHIPUR
TULANGA
BARSHITAKLI
MOHOKHED
BHENDIKAJI
KARANJA
CHONDHI
PATTIAWRAI
PARDI
BALDEO
SHELU
PIMPRI
MANGRUL
MALEGAON
CHIWARA
MENDARA
TAPOWAN
SAWARGAON
KAJALAMBA
BASIM
KRISHNA
KURHA
RISOD
TEHSIL PLACES
OTHER MARKET PLACES
VILLAGES SELECTED

holdings were also selected randomly out of all holdings in each selected village for keeping under observation the entire area under cotton, jowar and groundnut in these holdings. A holding for the purpose of the present enquiry was defined as all agricultural land which is operated or managed by one cultivator alone or by two or more cultivators jointly without regard to ownership, size or location. In other words, an operational holding was taken as the unit. For selection of these holdings, the patwari's crop statement for the year 1951-52, for each of the selected villages was taken as the basis. This statement includes a list of cultivators in respect of the agricultural area of the village together with the survey numbers which they operate. Careful instructions were given for checking this list with the help of the land revenue register (Jamabandi) and otherwise. Two cultivators were selected randomly out of this list. A careful enquiry was made about the operational holdings of these cultivators in the year 1952-53, including any area that they may be holding outside the limits of the village, and all fields growing the crops under study in these holdings were kept under observation. The average size of the holding and the size distribution of the holdings selected for the enquiry in this manner, is discussed later.

One experienced demonstration kamdar of the Agricultural Department was posted on a whole time basis in each village after being given suitable training by a senior statistician from the Indian Council of Agricultural Research for making observations and recording daily operations and other data in respect of the selected holdings and fields and collecting all other information required for the project. One agricultural assistant who was an experienced agricultural graduate from the department was placed in charge of 10 demonstration kamdars to supervise their work. An extra Assistant Director of Agriculture was in charge of the entire organization of the field work which was under the administrative control of the Director of Agriculture, Madhya Pradesh. The returns were forwarded after careful scrutiny by the supervisory staff of the scheme to the Statistical Adviser, Indian Council of Agricultural Research for analysis. In addition to the field supervisory staff of the scheme, the field work was also inspected by the statistician and the Statistical Adviser of the Indian Council of Agricultural Research. The field work commenced on April 12, 1952 and ended on 22nd May, 1953. But for the slight initial delay in a few of the demonstration kamdars joining their posts, the work proceeded according to plan and was in general satisfactory.

As stated earlier, the method of enquiry was that of direct observation. This involved recording of all operations done on the selected fields and holdings during the period of the survey by the demonstration kamdar located in each village and in continuous contact with the farmers concerned. An account of the expenditure incurrred on the cattle in each of the selected holdings was also to be maintained. The enumerators were required to record the data in the following proformas :

I(A) – The list of holdings for the selected village.

I(B) – A village schedule containing information regarding classification of area, crop acreages and yields, human and cattle population and general conditions of cultivation.

II(A) – Particulars about the area and yield of crops, cattle and stocks of cattlefeed and farm yard manure for the selected holdings.

II(B) – A holding questionnaire including details regarding the cultivator and his family, classification of area, its ownership, crop yield, implements etc. for the selected holding.

III(A) – Record of daily operations for each field selected in the sample of fields showing human and bullock labour and materials required for the different operations and payments made in cash or in kind.

III(B) – Same as III(A) but for fields in the selected holdings.

IV – Record of expenditure on cattle such as fodder, concentrates, grazing etc. and income from livestock products.

V(A) – Preliminary information for fields selected for crop cutting.

V(B) – Results of crop cutting.

Forms I(A) and (B), II(A) and (B) and V(A) and (B) were to be filled once for the crop season under study, whereas forms III(A) and (B) and IV were to be filled daily and submitted fortnightly. Specimens of these forms are appended (Appendix I).

Among the forms prescribed, form I(A) provided the list of holdings in the selected village out of which two random holdings were selected for enquiry. The manner of preparing this list is described already. Form I(B) gave information regarding the general agricultural and economic background of the selected village. The information was to be filled with the help of patwari records of land utilisation, census data for the 1951 human and cattle population and enquiry among the village farmers. Forms II(A) and (B) referred to the agricultural and economic conditions of the selected holdings. Form II(A) also provided information which could possibly serve as a check on the data collected in form IV on the maintenance of cattle. Both forms II(A) and II(B) were to be filled by careful observation supplemented by an enquiry from the farmers of the selected fields and holdings. Form III was the most important record in the whole enquiry. It was a daily diary of operations in all fields selected for study whether individually or in the selected holdings. The enumerator was expected to see for himself what operations were going on in particular fields and what amount of labour was working and to collect data regarding payments made in cash and kind by careful enquiry both from the farmer as well as labourers. He was, in addition, required to obtain information on the common rates of wages and prices of materials prevailing locally in different parts of the season. Form IV was the basis for calculating the cost of bullock labour by maintaining a daily account of all kinds of expenditure incurred by the farmer on his cattle and the returns he obtained from them. The information in this form was to be recorded by the enumerator by visiting the farmer's cattle shed at suitable times and also by enquiry with the farmer. In order to calculate the cost of production per maund of the crop, sample crop cutting in plots of standard size recommended for crop cutting surveys, 1 /40 acre for the cotton and 1 /80 for jowar and groundnut, was planned to be carried out in each field belonging to the sample of individual fields as well as in one randomly selected field per holding in respect of each of the three crops. The relevant information was recorded in Forms V(A) and V(B). Although information on the yield obtained by the farmer was also sought, it was generally found that farmers understated their production and it was the results of the crop cutting that were used in calculating the estimates of yield and cost of production per maund of the crop.

III—THE METHOD OF ANALYSIS OF THE DATA.

The project has yielded a voluminous amount of data. Apart from forms I, II and V which were to be filled only once, approximately ten thousand returns for forms III(A) and III(B) and twelve hundred returns for form IV were received. Extraction from these returns of the data pertaining to each field and their consolidation in a suitable chronological order has been the most time consuming and laborious work preliminary to the analysis of the data. As a first step in the analysis, all items of cost such as hours of human and bullock labour, quantity of seed and manure and rents and taxes were reduced to per acre of the crop under study in respect of each field. Subsequent calculations were based on these per acre values.

All labour, human as well as bullock, was divided among five broad categories of field operations and in addition to estimating the average amount of total labour required per acre, averages for the individual categories were also calculated in order to show the relative requirements of human and bullock labour in different parts of the crop season. These categories are :—

(*i*) pre-sowing cultivation—cleaning of the field, ploughing, harrowing, manuring etc

(*ii*) sowing.

(*iii*) post sowing cultivation—weeding, interculture.

(*iv*) miscellaneous—erecting temporary fencing, repairing bunds, etc.

(*v*) harvesting and processing the produce—picking in the case of cotton, reaping the crop and threshing grain in the case of jowar, uprooting plants and plucking pods in the case of groundnut.

All labour was expressed as man, woman or bullock hours per acre required for each of the above categories and then totalled. Labour required for watching crops which formed part of miscellaneous labour was not included in that category because it was not on par with other labour in value. The money equivalent of this labour was shown as a separate item in calculating the cost of production per acre.

The human labour employed was partly hired and partly unpaid family labour. These two classes of labour were shown separately. In computing the money equivalent of the amount of labour spent, the actual payments made whether in cash or kind (*e. g.* jowar grain) were taken as the basis in respect of the paid labour. For labourers hired on a monthly or yearly basis, the salary paid and the approximate money equivalent of clothing or meals supplied was taken into account. For the unpaid labour, the average rate of payment per hour calculated for the specified category of operation from the data for payment made to hired labour, both in the sample of holdings and fields in a village, was used as the conversion factor.

Bullock labour was also of two kinds, hired and owned. Hiring of bullocks is, however, not a common practice in the tract and most of the farmers maintain their own animals and arrange exchange of bullock labour with their neighbours on a considerable scale. The bullock labour obtained on an exchange basis was treated on par with that from owned bullocks. In a few cases where bullocks were hired, the actual hiring rate paid was used for calculating the money value of the hired bullock labour. For estimating the money equivalent of labour from owned bullocks, an account was kept of the cost of maintenance of bullocks in respect of each holding in the sample. The cost of bullock labour calculated from these data is discussed in a later section.

Seed and manure constitute practically the only materials on which expenditure is incurred. These materials, when purchased, were charged at the rate actually paid. When they were home produced, they were charged at the prevailing market rate. Apportionment of part of the cost of manures to subsequent crops to account for their residual value was not attempted. Such an apportionment, apart from being arbitrary, would have to take into account the manures applied to some of the fields under study during years previous to the enquiry and it is not feasible to obtain reliable information on the quantity of manure appplied in the past or its cost. The sample of fields under observation would include an appropriate proportion of fields receiving the benefit from various stages of residual effects of the manure applied in the past for which no cost is charged. There is, therefore, no risk that the cost of manuring would be over-estimated by charging the entire cost of the manure applied in the year of the enquiry to the crop under observation. The procedure appears satisfactory at least until objective evidence becomes available for making a scientific apportionment of the cost of manuring over different years.

Information on land revenue and lease rent, where the fields were taken on lease, was collected in respect of fields belonging to the sample of holdings. These rents were either cash or a share of the produce mostly on a 50 : 50 basis. In the latter case, the rent was converted into money value on the basis of the quantity of the produce delivered to the owner at the prevailing market rate. Similar information was unfortunately not collected for the sample of individual fields.

For estimating the expenditure on implements, figures for the approximate current value of the implements, and their life expectation as well as the cost of repairs during the year of the enquiry were obtained for each holding in the sample. The total expenditure on implements on each holding was calculated from these data. This was reduced to per acre basis by dividing the total expenditure by the cultivated area of the holding. Bullock carts were excluded from this calculation since they are used for transport and not for crop production.

In analysing the data, one village (Bhendikaji) in Akola tehsil, the field sample in one village (Nagod) in Balapur tehsil and one field in another village (Pattiamrai) in the same tehsil had to be rejected. The work of the kamdar in Bhendikaji was reported to be negligent and was found unreliable on inspection. The field sample in Nagod village was not selected randomly and abnormal values of labour, which cannot be explained, had been recorded for the rejected field in Pattiamrai.

The samples of individual fields and holdings have been analysed separately for the cotton and jowar crops. Apart from the fact that additional data were obtained from the sample of holdings, for example, maintenance cost of bullocks, the results for the two samples served as a valuable check on each other and it is a satisfactory feature of the present investigation that the two sets of results are generally in close agreement. For the groundnut crop, the number of fields was rather small in both samples on account of the fact that several holdings had no fields under groundnut and few holdings had more than one field. No groundnut field could be selected for study in eight villages on account of the total absence of the crop in those villages. Hence the distinction between holding and field samples was ignored for groundnut and all fields in each village were treated as if they were a single sample of individually selected fields.

An important aim of the present pilot enquiry is to find out what the design of future enquiries should be in regard to the size of the sample and its distribution in order that the resulting estimates of the cost of production should attain a prescribed degree of precision. Guidance on this point will be provided by the analyses of variance of the total cost and its components for each crop, since these analyses show the magnitude of total variability and contribution to it from different sources, namely villages, holdings and fields. These analyses of variance were worked out and are presented in the report.

IV—RESULTS.

(a) Some common background data.

Before discussing the results on the estimation of the cost of production for individual crops, it is necessary to summarise some information which provides the common background to the study of the three crops. This information relates to the details of the villages and holdings selected for enquiry and the valuation of bullock labour. The present section deals with these items.

(i) The villages :

Information of general interest in regard to the agricultural set-up of the selected villages was collected in form 1(B). This information is consolidated in tables 1 and 2. Table 1 relates to land utilization and cropping and table 2 to human and cattle population. It is seen from table 1 that the average area per village is 1458.5 acres out of which 70% was sown during the season. The remaining 30% was distributed among the following categories of land utilization :

Forest	10.0%
Land not available for cultivation	2.5%
Culturable waste	3.6%

Grazing land	5.9%
Trees and groves	0.1%
Fallow	7.9%

Of the area sown, cotton, jowar and groundnut account for 41.1%, 32.7% and 7.0% respectively. It may be noted that in table 2 population data for 3 villages are not given. This is due to the fact that two villages, Mahamadabad and Pattiamrai were deserted and their population which was merged with that of other neighbouring villages could not be enumerated separately while figures for the third village, Sawargaon, were rejected because they were not trustworthy. The average population of a village is seen to be 416 men, women and children. The population is almost entirely agricultural (96.3%). It is interesting to note that the cattle population includes a number of buffaloes, sheep and goats in addition to bullocks and cows.

The common soil of this tract is medium or heavy black with a light and rocky soil in some places. The most common crop rotation is cotton-jowar and to some extent cotton-jowar-groundnut or cotton-jowar-rabi. Seed is home produced or locally procured for most of the crops ; for cotton it is obtained from outside, from the market, ginnery or agricultural department depot. The usual seed rates per acre are 8 to 16 lb. for cotton, 2 to 6 lb. for jowar, 40 to 100 lb. for groundnut and 30 to 60 lb. for wheat. Manuring is not common. The practice is to apply whatever quantity of farm yard manure is produced on the farm to different fields at intervals of a few years, preferably to those fields where the crop is cotton. The quantities applied vary from 2 to 15 cart-loads per acre.

Several markets are accessible to the farmer for marketing his produce. These are at Akola, Murtizapur, Amraoti, Karanja, Shelu, Mangrulpir, Washim, Akot, Khamgaon, Shegaon etc. The majority of the villages in the sample have a market within a distance of 10 or 15 miles, the mode of transport being largely by bullockcarts. The general practice is to sell the produce through a broker rather than through a cooperative or directly to the purchaser. There is ordinarily no dearth of labour for farm operations except in some places at the time of harvest and occasionally during the weeding season.

(*ii*) *The holdings :*

As stated earlier, two holdings were selected randomly in each of the selected villages from a list of holdings for the village. Details regarding these 60 holdings including area, cultivator's title to land, cropping, size of the farmer's family and the number of his bullocks are given in table 3. The average size of the holding works out to 39.73 acres inclusive of a fallow area of 4.9 acres and has a standard error of 4.83 acres. The distribution of the holdings according to size is as follows :—

Size Class.		*No. of holdings.*
0 to (but not including)	10 acres	11
10 to	-do- 20 acres	10
20 to	-do- 30 acres	11
30 to	-do- 40 acres	4
40 to	-do- 50 acres	8
50 to	-do- 60 acres	7
60 to	-do- 100 acres	5
100 and above		4
	Total :	60

The size of holdings covers a wide range, the smallest holding being 2.0 acres and the largest 208.7 acres. Taking into account the standard error of the present sample, it may be asserted that the average size of holding in this district is not likely to be less than 30 acres, or if the fallow area is omitted, less than 25 acres. It may be recalled that the concept of holding adopted for the purpose of the present enquiry is that of an operational holding, *i. e.* all land cultivated and managed with common resources irrespective of size, location or ownership. It is interesting to note that the average size of holding in 1951-52 of the sample of 60 cultivators selected on the basis of the village crop statement for that year was only 21.16 acres. It was, however, discovered when defining for the year 1952-53 the operational holdings of the selected farmers that a number of fields which were shown in the crop statement as having been cultivated by separate parties did not constitute, in reality, separate operational holdings. The parties concerned were usually relatives, cousins, brothers or even father and son and cultivated the land together from common resources. Thus the 60 holdings selected in our sample also include additional 24 holdings shown separately in the revenue records. Further, holdings as shown in the crop statement did not take into account the land belonging to a holding outside the boundary limits of the village. The latter which is as much as 7.47 acres per holding on the average must be included in the selected holdings as it is operationally a part of them. We thus arrive at the average size of 39.73 acres for the operational holdings included in our sample starting with the average size of 21.16 acres for 1951-52 for the same set of 60 cultivators as follows :—

Average size of holding according to crop statement 1951-52	21.16 acres
Add due to merger of holdings shown separately in crop statement and leasing of additional fields in 1952-53	12.60 acres
Deduct due to partition and leasing out of fields in 1952-53	1.50 acres
Add land cultivated outside boundary of village	7.47 acres
Average size of operational holding in 1952-53	39.73 acres

The possibility of an upward bias in the average size of holding owing to the method of selection adopted whereby holdings which appeared as more than one in the crop statement had a larger chance of being included in the sample cannot be ignored. Even so, the analysis above makes it clear that the average size of the operational holding is large, being of the order of 30 to 40 acres.

From the data on cropping for the selected holdings (table 3), it is seen that 37.9% of sown area was under jowar, 41.4% under cotton and 9.0% under groundnut. These figures compare well with the cropping of the entire area of the selected villages given earlier. It will be seen further from table 3 that the number of bullock pairs per holding is closely correlated with the size of the holding. Thus there are as many as 10 bullock pairs in holding number 57 occupying 208.7 acres which is largest in the sample.

Of the total area of the holdings in the sample, 79% is owned land and 21% taken on lease for cultivation.

(iii) The cost of bullock labour :

As mentioned earlier, an account of the cost of maintenance of bullocks was kept in respect of each holding in the sample. It is seldom that the farmer maintains only bullocks. He generally has one or more cows and their calves in addition and in the present enquiry it was observed that nearly half of the farmers in the sample kept buffaloes also. Expenditure on all this livestock had to be recorded together as its direct apportionment among different categories of animals is practically impossible since all cattle are fed and otherwise maintained together. The expenditure on cattle included the cost of feeding (*e. g.* fodder, concentrates, grazing charges etc.), miscellaneous expenditure such as on oil, salt, medicines etc. and depreciation and cost of repairs for cattle sheds where these were used. From this expenditure return in the form of farm yard manure produced by the animals was subtracted to give the net

expenditure. It may be mentioned, however, that the record for the farm yard manure produced was not very precise and what is even more important to note that not much manure was produced, presumably because most of it is burnt as fuel for which no account could be obtained. In this way the average total cost of maintaining cattle per fortnight was computed for each of 50 holdings in respect of which the cattle maintenance account was kept. These data are shown in table 1, Appendix II. In five holdings there were no animals at all while the data for 5 more holdings could not be used as they were incomplete. From the data for 50 holdings, the average cost of maintenance for a bullock per fortnight was derived by solving a set of normal equations on the principle of least squares. This method is explained in Appendix II. The solution of these equations gave the value of Rs. 4.62 per fortnight per bullock or Rs. 221.76 per year per bullock pair. To this amount has to be added the depreciation on bullocks which was calculated from the data on the purchase price or in the case of homebred stock on the valuation of the present price of the bullocks in the holdings in the sample, their ages and life expectations. The average annual depreciation came to Rs. 50.60 per bullock pair. The total cost of maintaining a bullock pair for a year would thus be Rs. 272.36. This cost is to be distributed over the total number of working hours for which a bullock pair is employed during the year for all kinds of work. The total cost of maintenance per year divided by the total number of working hours of the animals gives the cost of one hour's work per bullock pair. From the present data, the average number of total working hours per pair during the year was computed as 127.2 days with an average day length of 6.16 hours and hence the cost of one hour's work by a bullock pair came to Re. 0.3477. This value was employed for converting into money equivalent the bullock working hours per acre in respect of owned animals. It is interesting to compare this cost with the average hire rate for the hired bullocks which was Re. 0.3880 per hour.

The results of the analysis of the data collected for individual crops are given below.

(b) Cotton.

Man labour.

Table 1, Appendix III shows for individual fields† in both samples the man hours per acre of cotton required for different categories of operations and their total as well as the money equivalent of the total. The averages* for the different categories, the total and the money equivalent of the latter were calculated for each of the six tehsils and then pooled to give the average for the entire district. The tehsilwise and district averages for all these items are given in table 4. An analysis of variance was carried out for the total amount of man labour required per acre of cotton to study the variability of this important component of the cost of cultivation. The analyses for the holding and the field samples are shown separately in table 5. On the basis of these analyses, standard errors for the district averages were calculated for the respective samples and are included in table 4.

The estimated man hour requirement per acre of cotton has a standard error of 4.64 (or 5.6 per cent) in the holding sample and 7.57 (or 8.7 per cent) in the field sample. Both here and in other tables it will be observed that the standard error for the holding sample is generally less than that for the field sample, because the former contained a larger number of fields than the latter. It will be seen from table 4 that man labour is mostly used for cultivation, half of the total labour being employed for pre-sowing cultivation and about one-third for interculture. It may also be noted that about 60% of the man labour employed is paid labour.

Woman labour.

Table 2, Appendix III shows for the individual fields for the two samples the woman hours required for various categories of operations, their total and the money equivalent of the latter. This table corresponds to table 1, Appendix III for man labour. The average amount of woman labour required for different categories of operations in each tehsil and for the whole district together with sampling errors for the district averages are shown in table 6. The errors are 6.4 per cent for the holding sample and 6.3 per cent for the field sample. The

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†The areas of the fields are shown in Appendix IV.

*Simple arithmetic means were calculated throughout, being easier to compute and more precise than weighted means. The latter, with areas of sample fields and villages for particular crops as weights, might appear to be more appropriate for representing values per acre of land under the crops, but were found to be little different on comparison with corresponding arithmetic means.

table also includes the money equivalent of total woman labour. The analyses of variance for the total woman labour per acre according to the two samples are presented in table 7.

Compared with the amount of man labour, woman labour represents 50% more hours but the money value of the total woman labour employed is very nearly equal to that of the man labour. It will be observed from table 6 that the bulk of woman labour is concentrated on weeding and picking. Upto 20% of it is used at the pre-sowing stage mainly for cleaning fields. Family or unpaid woman labour represents a much smaller fraction of the total amount of woman labour as compared to man labour, this fraction being less than 15%. Apparently women in the cultivator's family do not usually work in the fields.

The wage rates in rupee per hour used for conversion of family labour into money value for the different categories of operations are given in table 8 for each village in the sample. The absence of the value for man labour in several villages under harvesting represents the fact that man labour is not commonly employed for picking cotton. It may be mentioned that the payment for picking cotton is usually made per maund of cotton picked and the figures for the money value of woman labour are derived from actual payments and hours of work. It will be seen from this table that for man labour and to a less extent for woman labour, wage rates appear to reach a peak at sowing time.

Bullock labour.

The analysis of the total amount of bullock pair hours followed the same pattern as for human labour. Table 3, Appendix III gives for individual fields in both samples the bullock labour per acre required for various categories of operations. Averages for individual tehsils and for the district are given in table 9 and the analyses of variance in table 10.

The money equivalent of the bullock labour employed per acre of cotton is higher than that of man or woman labour. Nearly 60% of the bullock labour is utilized for pre-sowing cultivation, another 25% for interculture and the balance for sowing. As indicated earlier, only 7 or 8% of the bullock labour is hired, the rest being from owned bullocks. The estimate of the average amount of bullock labour required per acre has a sampling error of 7.9% and 10.6% in the holding and field sample respectively.

Materials.

Seed and in a relatively small number of fields manure are the only items under this head. Data for individual fields in both samples for expenditure on seed, manure and watching and for the holding sample only on land revenue, rent and implements, are given in table 4, Appendix III. The different types of manure, the number of fields to which they were applied, the average rate of application and its cost per acre are shown in the following statement :—

Kind of manure	No. of fields to which applied	Col. 2 as percentage of total number of fields sampled	Average rate of application per acre	Average cost per acre, Rupees
(1)	(2)	(3)	(4)	(5)
F. Y. M.	38	20.4	7.8 cartloads	23.49
Sheep folding	5	2.6	..	31.11
Oil cake	4	2.1	66.5 lb.	6.46
Ammonium sulphate ..	2	1.1	15.0 lb.	3.42

It is important to note that the application of manure is not common even for cotton which is the most important money crop of the farmer in this tract. A similar result was obtained by analysing the ancilliary information collected in the course of sample surveys for estimating the yield of cotton by crop cutting which were conducted in this tract. From three years' data (1944-45 to 1946-47), it was observed that only 22.7% of the cotton growing fields received any manure at all.

The average quantity of seed per acre and its money equivalent for different tehsils and for the whole district as well as the average cost of manure over the whole district are shown in table 11. Expenditure on seed and manure represents only a small fraction of the total cost of cultivation of cotton.

Rent and taxes.

Information on land revenue and terms of lease rent where the fields were taken on lease was collected in respect of the holding sample (Table 4, Appendix III) The rent paid was either cash or a share of the produce. In the latter case it was converted into money equivalent on the basis of the quantity of the produce delivered to the land owner and the prevailing market rate. It is interesting to note that out of a total sample of 131 fields in the holdings 32 were taken on lease, the remaining being owned by the cultivators concerned. The average lease rent exclusive of land revenue for these 32 fields worked out to Rs. 23.29 per acre. The tehsilwise and district averages of land revenue per acre and the rent paid per acre for leased fields distributed over the entire sample are included in table 11.

Outturn of cotton.

In order to calculate the cost of production per maund of seed cotton, it is necessary to obtain reliable data on the outturn per acre for the fields in the sample. For this purpose, the field staff were required to carry out crop cutting on a random sample basis in one 1/40th acre plot per field. For the sample of individual fields, crop cutting was done in all fields. For the sample of holdings, it was done in one randomly selected field per holding. The data on the total production of cotton in the holding as reported by the farmers were also recorded. As has been the general experience, the latter proved to be under-estimates as compared with the results of crop cutting and consequently the average outturn of seed cotton per acre as estimated from crop cutting was alone utilized in the calculations. The results of the crop cutting survey in the field as well as the holding sample together with the figures of production as reported by the farmer are recorded in table 12. From the combined sample of fields, the average outturn per acre worked out to 221.72 lb. with a standard error of 16.0 lb. and this value was used in the calculation of the cost of cultivation per maund of seed cotton produced.

Estimation of cost of production.

We have thus assembled together the various components of the cost of production of cotton per acre, as well as per maund of the produce. The estimate of the average cost of production of cotton and its composition according to the present investigation in Akola district are as follows. The tehsilwise averages for money equivalents for different items of cost are shown in table 13.

Component	Holding sample		Field sample	
	Actual physical quantities per acre	Money equivalent per acre, Rupees	Actual physical quantities per acre	Money equivalent per acre, Rupees
1	2	3	4	5
Man labour	82.57 hr.	10.50	87.39 hr.	10.57
Woman „	123.99 hr.	9.49	138.57 hr.	10.51
Bullock „	45.32 hr.	15.88	49.36 hr.	17.39
Seed	13.89 lb.	1.65	13.47 lb.	1.79
Manure	..	5.41	..	3.36
Watch	..	0.17	..	..
Land revenue*	..	2.15	..	2.15
Rent*	..	5.69	..	5.69
Implements*	..	0.66	..	0.66
Total per acre		51.61		52.12
		± 2.28		± 3.59
Average outturn of seed cotton per acre ..			2.69 md.	
Total cost of production per maund of seed cotton		19.18		19.38

It will be seen that the agreement in the estimated cost of production per acre of cotton from the two samples is very close indeed. The standard errors of these estimates are also reasonable being 4.4% for the holding sample and 7.0% for field sample. The estimate thus provides a reliable measure of the cost of production per acre of cotton in Akola district during the year of the enquiry. Reduced to per maund of seed cotton, this cost comes to Rs. 19.18 for the holding sample and Rs. 19.38 for the field sample. It was noted that the price of seed cotton at the end of the picking season was approximately Rs. 240 per khandi (784 lb.) of seed cotton or Rs. 25.9 per maund.

The total money value per acre was computed in the above manner in respect of each field both in the sample of fields and of holdings and is included in table 4, Appendix III. An analysis of variance of this money value was carried out on each sample. The results are shown in table 14. The standard errors attached to the estimates of the cost of production per acre in money value in the above statement are based on these analyses.

*Calculated from holding sample only.

Crops mixed with cotton.

Tur (*cajanus indicus*) is usually grown mixed with the cotton crop, the method followed being to sow 1 to 4 rows of tur after every 12 to 20 rows of cotton with the same row spacing as cotton. In all such cotton fields in the sample, the area under tur was calculated from the proportion of the number of rows of tur to those of cotton and both the tur area as well as the expenditure thereon were excluded from consideration when calculating the items of cost under cotton.

(c) Jowar

Man labour.

The man hours per acre of jowar required for each category of operations, total and the money equivalent of the total are given in table 5, Appendix III for each field* in both holding and field samples. The corresponding tehsil and district averages are given in table 15 and the analyses of variance for the total man hours in table 16. The standard errors for the district average for man labour are 4.5 and 5.8% in the holding and field sample respectively, values which are slightly lower than those for cotton. Hired labour constitutes about 60% of the total man labour as in the case of cotton.

Comparing the data in table 15 with those for cotton (table 4) it would be observed that jowar cultivation requires about 21.4 per cent more man labour than cotton, and what is striking 36.4 per cent more in money equivalent for this labour. Although man labour required for jowar is slightly less for pre-sowing cultivation and interculture as compared to cotton, harvesting and threshing of jowar are done mainly with the help of man labour unlike cotton and absorb a substantial amount of this type of labour. Further, wage rates for man labour are highest for harvesting and threshing of jowar (table 19), which explains the much higher money equivalent for man labour for jowar as compared to cotton.

Woman labour.

Table 6, Appendix III gives for individual fields in both samples, the expenditure of woman labour in various categories of operations, total and its money equivalent. The tehsil and district averages are given in table 17 and analyses of variance in table 18. The sampling errors of the estimate of total woman labour in the holding and field samples are 7.2% and 10.6% respectively. It will be observed from a comparison of tables 6 and 17 that the extent of woman labour expenditure on jowar crop is only half as much as that on cotton, the difference being particularly striking in the post-sowing operations and harvesting. The farmer seems to bestow less care on the weeding of his jowar fields than on cotton and woman labour forms a small part of the labour employed for harvesting and threshing jowar. As was observed in the case of cotton, family labour forms less than 10% of the total woman labour employed.

The wage rates used for the conversion of unpaid labour into money value for different categories of operations in each sample village are given in table 19. The rates of wages during the harvesting season are usually not fixed on a day basis but on a contract basis. This seems to result in higher wage rates for that operation than in other parts of the crop season.

Bullock labour.

Data for bullock labour requirement for individual fields, the corresponding tehsil and district averages and analyses of variance are given in table 7, Appendix III, table 20 and table 21 respectively.

The money equivalent of the bullock labour required per acre of jowar is greater than that of man or woman labour and hired bullock labour forms only a small fraction of the total, just as in the case of cotton. The estimate of the average amount of bullock labour required per acre has a sampling error of 4.7% in the holding and 5.5% in the field sample.

*The areas of the fields are shown in Appendix IV.

The total bullock labour requirement of the crop is seen from table 20 to be of the same order as for cotton (table 9) notwithstanding the fact that an appreciable amount of bullock labour is required for threshing which is included in the harvesting operation. This is compensated by lesser amount of bullock labour spent on the preliminary cultivation and interculture for jowar fields.

Materials.

With the exception of 2 fields where oil cake was used at the rates of 65 and 38 lb. per acre, farm yard manure was the only manure used for jowar. Out of the total of 170 jowar fields in both the samples, 22 or 12.9% were manured with farm yard manure at the average rate of 4.10 cartloads per acre and an average cost of Rs. 11.9 per acre. The percentage of jowar fields manured was 14.1 as compared to 26.2 for cotton. Thus the cultivator seems to be spending much less on manuring his jowar fields both by manuring them less frequently and also by applying a smaller quantity of manure per acre than in the case of cotton. The average quantity of seed per acre and its money equivalent for different tehsils and for the whole district are shown in table 22. Seed and manure requirements for individual fields are shown in table 8, Appendix III. Expenditure for seed and manure represents even a smaller fraction of the total cost of jowar cultivation than of cotton.

Rent and taxes.

As mentioned earlier, information about land revenue and lease rent was collected only in respect of fields in the holding sample (table 8, Appendix III). Out of 112 jowar fields in this sample 31 were taken on lease and the average lease rent exclusive of land revenue worked out to Rs. 28.69 per acre. The tehsilwise and district averages of land revenue and rent paid per acre for leased fields distributed over the entire sample are included in table 22. The lease rent for jowar is considerably higher than for cotton and it is not possible to offer an explanation for this difference.

Outturn of jowar.

To estimate the outturn of jowar per acre, crop cutting on a random sampling basis was done in each field in the field sample and in one randomly selected field in each holding of the holding sample. In addition, the total production of jowar as reported by the farmers was also recorded. As in cotton, the outturn of jowar per acre calculated from the latter was found to be an under-estimate and the average outturn per acre estimated from crop cutting was alone employed for calculating the cost of production per maund of jowar. The results of crop cutting in both the holding and the field samples as well as the production as reported by the farmers are recorded in table 23. For the combined sample of fields the average outturn per acre according to crop cutting was 443.2 lb. or 5.39 md. with a standard error of 27.1 lb.

Cost of production of jowar.

The estimate of the average cost of production of jowar and its composition according to the present results are as follows. Tehsilwise averages of this cost are given in table 24.

Component	Holding sample		Field sample	
	Actual physical quantities per acre.	Money equivalent per acre, Rupees	Actual physical quantities per acre.	Money equivalent per acre, Rupees.
1	2	3	4	5
Man labour	107.79 hr.	14.70	98.45 hr.	13.82
Woman ,, ...	65.61 hr.	5.05	69.66 hr.	5.38
Bullock ,, ...	47.92 hr.	16.80	43.77 hr.	15.23
Seed	3.85 lb.	0.63	3.90 lb.	0.59
Manure	..	1.49	..	2.07
Watching	..	0.40	..	0.60
Land revenue*	..	1.90	..	1.90
Rent*	..	9.16	..	9.16
Implements*	..	0.67	..	0.67
Total per acre		50.80		49.42
		± 3.59		± 3.74
Average outturn of jowar grain per acre		5.39 md.		
Cost of production per maund of jowar		9.42		9.17

The estimates from the two samples are in close agreement. The total money value per acre was computed in respect of each field (table 8, Appendix III) and the analysis of variance of these values were carried out in both the holding and the field samples. The results are given in table 25. The standard errors of the estimates of cost were calculated from these analyses as in the case of cotton. The sampling errors of the estimate of the cost of production of jowar per acre are 7.1% for the holding sample and 7.6% for the field sample. The estimated cost of production per maund of grain comes to Rs. 9.42 and 9.17 for the two samples respectively. The price of jowar grain was 8 to 10 rupees per maund at harvest.

In addition to jowar grain, the stalks which are harvested are used as fodder for the cattle and the value of the fodder produced has to be taken into account in computing the return to the farmer from his jowar crop. In the present enquiry, the amount of fodder produced and its money value were unfortunately not estimated.

A variety of minor crops including minor pulses are grown mixed with jowar. Since the seed is mixed with jowar seed before sowing, the only additional expenditure on these crops is that for harvesting and threshing, apart from the small quantity of seed required. It, therefore, appears very likely that the balance sheet of expenditure on these crops would be favourable and would add to the net return from the jowar crop. Data on these minor crops were, however, not recorded satisfactorily during the present investigation.

* Calculated from holding sample only.

(d) Groundnut

It may be recalled that in analysing the data for this crop, the two samples were treated as a single sample of fields on account of the small number of fields available in each sample.

Man labour.

The man hours required for the different categories of operations, their total and its money equivalent are given in table 9, Appendix III for individual fields.* The tehsil and district averages for these quantities are given in table 26 and the analysis of variance of the total man hours in table 27. The standard error of the estimate of the total man labour is 6.8 per cent. The proportion of hired labour is the same as that noted for the other crops, *i.e.*, about 60 per cent.

It will be seen from tables 4 and 26 that the man labour requirements per acre of this crop is similar to that of cotton with the exception that it is greater than cotton at the time of harvest. Jowar, of course, requires still greater amount of man labour for harvesting and threshing (table 15).

Woman labour.

Table 10, Appendix III gives for individual fields, the expenditure of woman labour in different categories, their total and money equivalent of the total. The tehsil and district averages for these quantities are given in table 28 and the analysis of variance of total woman hours in table 29. The sampling error of the estimate of the total woman labour required is 7.6 per cent. of this total, only a small proportion (14.8 per cent) is family labour as in the other two crops.

Wage rates employed for the conversion of unpaid labour into money value for different categories of operations for each village are given in table 30. Generally the rates tend to increase at sowing and at harvesting as these operations have to be completed within a narrow span of time.

Bullock labour.

Data on bullock labour required for different operations in individual fields are given in table 11, Appendix III, the tehsil and district averages in table 31 and the analysis of variance in table 32. The sampling error of the estimate of the total bullock labour required per acre is 7.6 per cent.

Both the total amount of bullock labour per acre as well as its distribution among different operations follow cotton rather closely. The proportion of hired bullock labour is also low as observed already in the other two crops.

Materials.

Only 8 fields out of a total of 64 *i.e.*, 12.5 per cent. of the fields, were manured with farm yard manure. The average quantity applied was 5.88 cart loads per acre and the average cost Rs. 17.02 per acre. The quantity of seed sown per acre and its money equivalent for individual fields are given in table 12, Appendix III and averages for different tehsils and for the whole district are shown in table 33. It will be noted from this table that unlike jowar and cotton, expenditure on account of seed is an appreciable component of the cost of cultivation of the groundnut crop.

Rent and taxes.

Information about land revenue and lease rent collected in respect of the holding sample is included in table 12, Appendix III. It is seen that out of 30 fields under groundnut in the sample of holdings, 12 had been taken on lease for an average rent exclusive of land revenue of Rs. 41.39 per acre. For 4 fields out of these in Mangrulpir tehsil, the average lease rent reported was as high as Rs. 77.76 per acre. This is ascribed mainly to the fact that the lease was on a crop sharing basis and the yield of groundnut in 2 fields was reported to be as high as 1000 lb. of dry pods per acre.

Outturn of groundnut.

To estimate the outturn of groundnut, crop cutting on random sampling basis was done in 40 fields in the sample. The season was adverse for groundnut, there being no rain

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* The areas of the fields are shown in Appendix IV.

during the maturing period of the crop and some of the fields were harvested prematurely. Crop cutting could not be carried out in these fields. Table 34 gives tehsilwise averages for the produce as reported by the farmers side by side with that estimated from the combined sample for crop cutting. From the latter, the average outturn for this district was estimated to be 302.8 lb. or 3.68 maunds of dry pods per acre with a standard error of 41.1 lb. and this estimate was used in the calculation of the cost of production per maund of groundnut. The yield was obviously poor, the normal yield for the district being about 9 md. per acre.

Cost of production of groundnut

The estimate of the average cost of production of groundnut and its composition as determined from the present enquiry are as follows. The tehsil averages of these quantities are given in table 35.

Component.	Actual physical quantities per acre.	Money equivalent per acre, Rupees.
1	2	3
1. Man labour	97.38 hr.	12.52
2. Woman labour	112.88 hr.	8.05
3. Bullock labour	47.87 hr.	16.74
4. Seed	42.95 lb.	13.70
5. Manure	..	2.13
6. Watching	..	1.29
7. Land revenue*	..	1.28
8. Rent*	..	16.56
9. Implements*	..	0.64
	Total	72.91 ± 8.84
Average outturn of dry pods per acre		3.68 md.
Cost of production of groundnut per maund of dry pods :		Rs. 19.81.

The sampling error of the estimate of the cost of production per acre is 12.1 per cent. This somewhat high error is mainly due to extreme heterogeneity in lease rent. The total money equivalent per acre was computed for each field (table 12, Appendix III) and the analysis of variance of these was carried out. The results are given in table 36 and the sampling error is based on these results. The market price of groundnut pods at harvest was about Rs. 18 per maund. In calculating the returns from the groundnut crop, the value of the harvested plants which provide a nutritious fodder must be taken into account. No data on this item were, however, collected in the present enquiry.

* Calculated from holding sample only.

(c) Comparison of the Requirements for the Cultivation of the Three Crops.

Comments have been made already in the course of the discussion of the results for individual crops on the relative requirements of the various components of the cost of cultivation for the different crops. It is important to recapitulate this comparison as a considerable part of the interest in the present study is centered round the relative demand that the alternative crops make on the cultivator's labour and financial resources. Tables 37 and 38 have been prepared to facilitate this comparison. In table 37 is shown man, woman and bullock labour for different categories of operations for the three crops and in table 38 are given money equivalents of this labour and of other requirements for producing these crops. The major component of the cost of production is represented by human and bullock labour while seed, manure, implements and land revenue represent the second component. Where fields are taken on lease for cultivation, the rent paid to the land owner apart from the land revenue forms the third factor of the cost of cultivation. For a proper comparison between crops, this last factor has to be distributed over all fields under a particular crop although its actual incidence is confined to a fraction of the fields that are taken on lease. These three subdivisions of the cost of production of each crop are set out below. For jowar and cotton, the values represent simple means of the two samples of holdings and fields.

Cost of production—Rupees per acre.

Subdivision of cost	*Cotton*	*Jowar*	*Groundnut*
1. Human and bullock labour	37.14	35.99	38.60
2. Seed, manure, implements, land revenue	9.72	4.96	17.75
3. Lease rent	4.77	9.16	16.56
Total	51.63	50.11	72.91

It would be seen that the total requirement in terms of money are the same per acre of cotton and jowar and almost one and a half times as much for groundnut. It is interesting to note that the total outlay on all kinds of labour is the same for all three crops, although as discussed in the previous sections, the distribution of different types of labour among different categories of operations shows considerable diversity. For example, less labour is employed on the cultivation and weeding of jowar than on cotton. But jowar requires much more labour for harvesting and threshing. Groundnut is intermediate in the spread of labour over the different operations, but follows the pattern for cotton more closely. It is important to recall that 60 per cent. of man labour and 85 to 90 per cent. of woman labour is hired whereas hired bullock labour is under 10 per cent. of the total. Comparing the second subdivision of cost, the most important difference is that due to seed between groundnut on one hand and jowar and cotton on the other. Between the latter two, seed and manure requirement for jowar is somewhat less than for cotton. The third subdivision of cost, namely lease rent, turns out to be as important as the second. Information on lease rent was secured for those fields in the holding sample that were taken on lease and the present estimates are based on 30 out of 131 fields for cotton, 31 out of 112 fields for jowar and 12 out of 30 fields for groundnut.

Apparently the proportion of fields taken on lease is highest for the groundnut crop and lowest for cotton. Lease rent per acre is also highest for groundnut and lowest for cotton. It is not possible to say whether the similarity between the proportion of fields taken on lease and the lease rent per acre has any significance. It may be recalled, however, that some of the high rents for groundnut are to be traced to the high yield of the crop which was shared equally by the owner and the cultivator. It may be pointed out also that the estimates of lease rent are based on a small sample of fields and are thus likely to have rather large sampling errors. If lease rent is not to be taken into account, the cost of cultivation for each crop would be the

sum of the first two items in the above statement. This cost would come to Rs. 40.95 per acre for jowar, Rs. 46.86 for cotton and Rs. 56.35 for groundnut. Comments on the relative costs for different crops per maund of the produce beyond those already made in the earlier sections would not be useful as the yield and consequently, the cost of production per maund of the crop is subjected to a much greater seasonal fluctuation as compared to cost per acre. It has been observed, for example, that the season of the enquiry was unfavourable for the groundnut crop and yield was poor.

The question whether the size of holding has any influence on the cost of cultivation per acre of a crop, was examined. Inspection of the data for individual holdings gave an indication for all the three crops of a much greater variation in the cost per acre among the smaller sizes of holdings and of a tendency for this cost to decrease with the increasing size of holding (Fig. 2, 3 and 4). Regression analysis, however, did not produce any evidence confirming such a trend and the matter was not pursued further.

V—PLANNING OF FUTURE ENQUIRIES.

In planning enquiries for the estimation of the cost of production of crops, the type and size of the sample and its distribution are the most important considerations. From the present investigation it would appear that between the two types of sample units, the operational holding and field, the former would seem preferable. For collecting reliable primary data relating to the cultivation of crops it is essential for the field investigator to develop personal contacts with the farmers and inspire their confidence. With the holding as a sampling unit, contacts will need be established with a relatively smaller number of farmers. Further, certain types of information like that on cattle maintenance can be secured only from the holding as a unit. Where the objective of the enquiry is more restricted, such as, for example the estimation of human labour required per acre of a crop, its division into paid and unpaid categories or distribution over different parts of the season, the individual field would provide a more appropriate and efficient unit.

The sample of holdings for enquiry will, obviously, have to be selected randomly in two stages, villages forming the first stage and a given number of holdings in each village the second stage. For conducting the enquiry a trained field investigator will have to be stationed on a full time basis in each village, since direct personal observations must form the basis for most of the data to be recorded. In the present enquiry each field kamdar was able to keep under observation 2 holdings and 6 fields in respect of the three crops, cotton, jowar and groundnut, *i.e.*, about 15 fields in all. If a sample of holdings alone is selected, it would appear from the experience of this enquiry that the investigator can manage four holdings under observation in each village. In the present enquiry three crops were being studied and if this number was varied or if the size of holding differed from that found here, a corresponding change in the number of holdings to be kept under observation per village will need consideration.

From the analysis of variance of the data on the cost of production for the sample of holdings for cotton and jowar crops, it is estimated that with four holdings per village a sample of about 700 villages will be required to provide results with a very high precision, namely with a standard error of 1%. This is clearly too large a sample to manage but a sample of about 30 villages will suffice for attaining a reasonable degree of precision, *i.e.*, a standard error of 5%. This means a sample of the same size as that selected in the present enquiry as far as the number of villages is concerned and the cost of the enquiry including field work and statistical analysis of data would also be of the same order, *i.e.*, about 75 thousand rupees. It may be added that a similar analysis of variance for the groundnut crop indicated a somewhat greater heterogeneity and a correspondingly larger sample for the same degree of precision but not much weight can be attached to these indications because of the very limited sample on which the analysis of variance was based for this crop.

From the figures of cost, it does not seem feasible to plan an enquiry of this kind for an individual district ; but it should rather be planned for an agricultural tract comprising of a group of districts as for example, the Berar cotton tract in Madhya Pradesh consisting of four districts or even for the larger black soil cotton tract of peninsular India including Berar, Bombay Deccan and northern districts of Hyderabad. Another example would be the irrigated cotton tract of Punjab & Pepsu, the crops to be studied in this case being, say, cotton, maize and wheat.

An important point to be borne in mind in planning cost of production enquiries is that there is a seasonal fluctuation not only in the yield of crops but even in the physical quantities related to crop production such as labour. For example, the amount of weeding and interculture will depend on the nature of the season including the amount and distribution of rainfall, while the labour required for harvesting and processing the produce per acre is obviously related to yield. These considerations lead to the conclusion that for determining the elements of the cost of production of a crop characteristic of a tract, it would be desirable to repeat the enquiry in the tract for, say, three seasons. An enquiry into the cost of production of cotton and rotation crops for 3 years in a tract with a sample of 30 villages each year will cost, on the present indications, about 2.25 lac rupees. This rather heavy estimate of cost is the consequence of the long period required for field work based on a full time staff of field workers and supervisors. It should be noted that keeping the same sample of holdings under observation throughout the period of three years is not only not necessary but should be avoided and a fresh sample of villages and holdings should be drawn each year. This will have the advantage of spreading information over a larger number of holdings and also eliminating the risk of a bias likely to result from keeping the same holdings under continuous observations over an unduly long period.

Certain other points which have emerged from the present pilot enquiry also need attention in organising cost of production studies. Foremost among these is the necessity of making the statistical staff associated with the enquiry available right from the commencement of the field work. This staff will thus get an opportunity at an early stage to become acquainted with the field procedures and the resulting primary data. What is far more important, they will be able to scrutinize the returns as they come in and arrange for whatever discrepancies or deficiencies that are noticed to be made good to the extent possible by timely action on the part of the field workers. In the present enquiry, the statistical staff except for the investigator was appointed for the analysis of the data about the time when the field work had mostly finished and several shortcomings in the data collected came to light when it was too late to rectify them. Another point refers to the frame for the selection of holdings for enquiry in the selected villages. This frame should be prepared carefully so that a complete list of operational holdings is available for selection. The reason for this precaution will become obvious by reference to the discussion of the method of selecting holdings adopted in the present enquiry. Thirdly, care is necessary in obtaining data on certain rather intricate but important aspects of the enquiry such as production and disposal of farm yard manure, expenditure on minor crops mixed with the main crops etc. It is also clear that the outturn of various crops which are the subject of study must be determined by using the crop cutting technique on a random sampling basis instead of relying on the farmer's reports of production. Further, the estimation of yield should not be confined to the main produce, such as grain, but the outturn of byeproducts like stalks, bhusa etc. and their money value must also be assessed. Lastly a constant general aim should be to measure all quantities physically and even where information is necessarily based on report, effort should be made to check it through alternative sources.

The consistency of the results obtained for different crops and the agreement observed between independent samples in the present pilot enquiry lead to the conclusion that reliable data relating to physical components of the cost of production of specified crops and their money equivalents can be secured and entitle us to recommend with confidence the extension of such enquiries on a large scale on the general pattern indicated above. There is no doubt that a large amount of information of practical, economic and scientific significance can be derived from these enquiries.

FIG. 2 : Correlation between the size of holding and the cost of production of Cotton in Akola district.

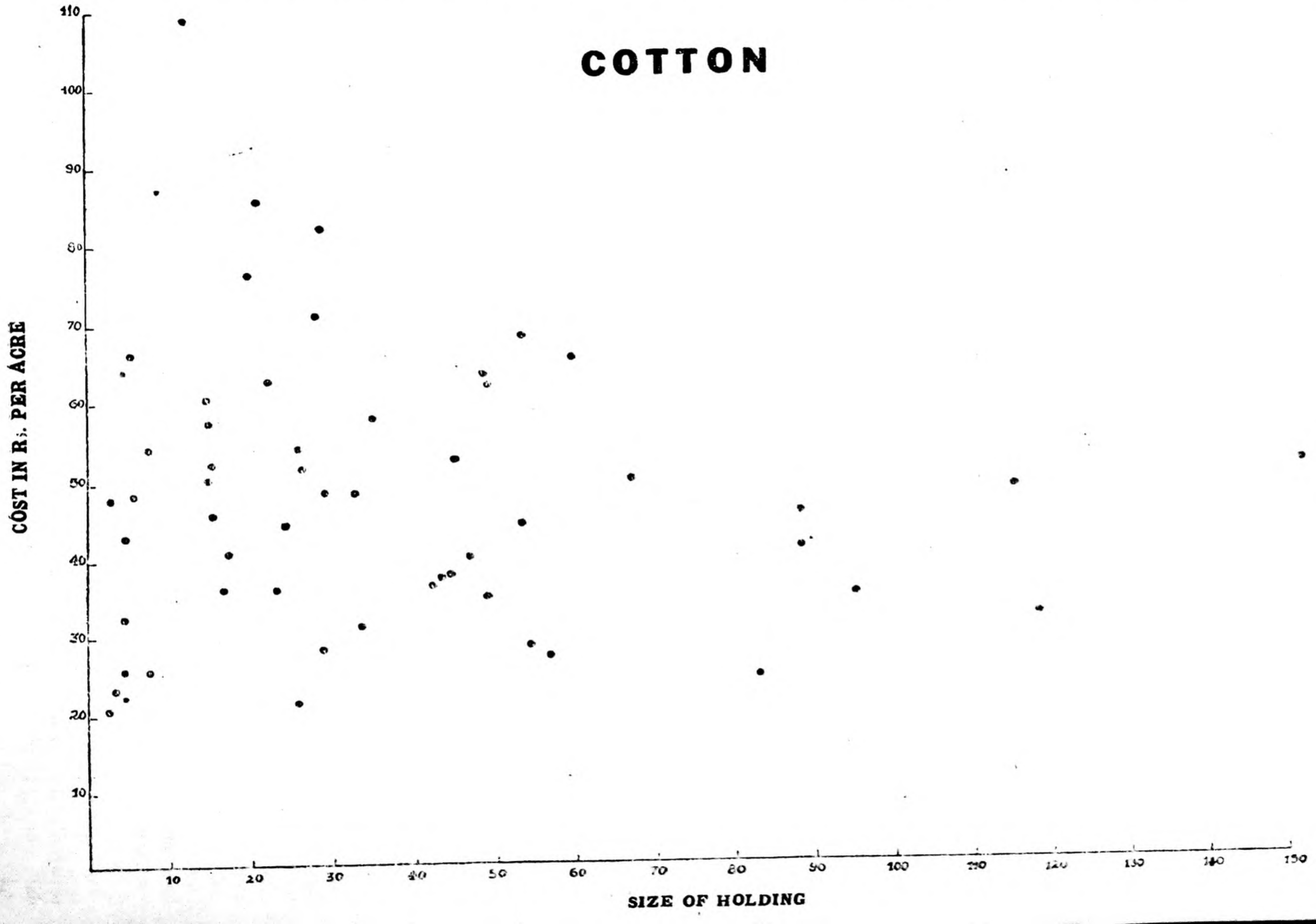
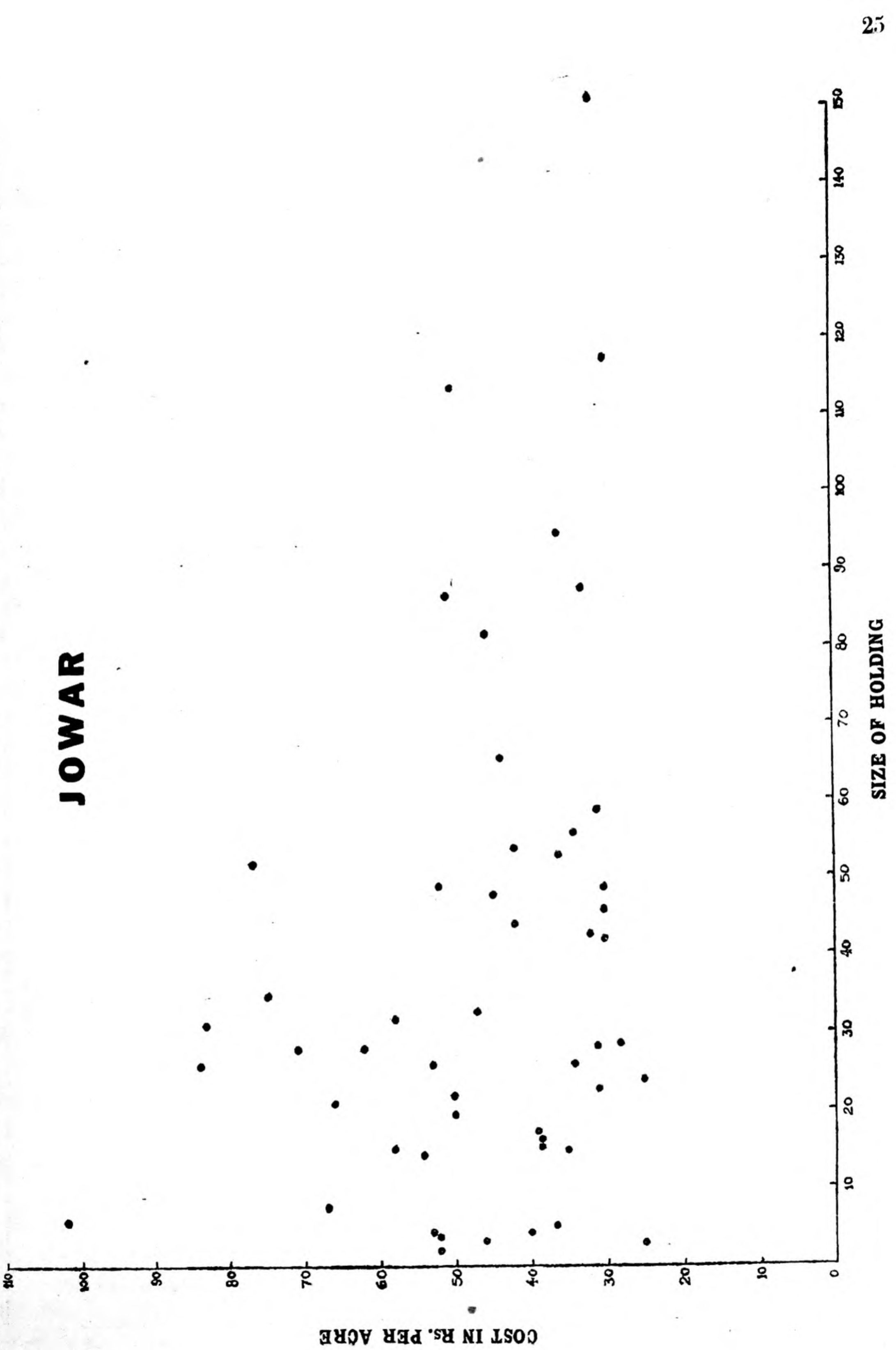


FIG. 3 : Correlation between the size of holding and the cost of production of Jowar in Akola district.



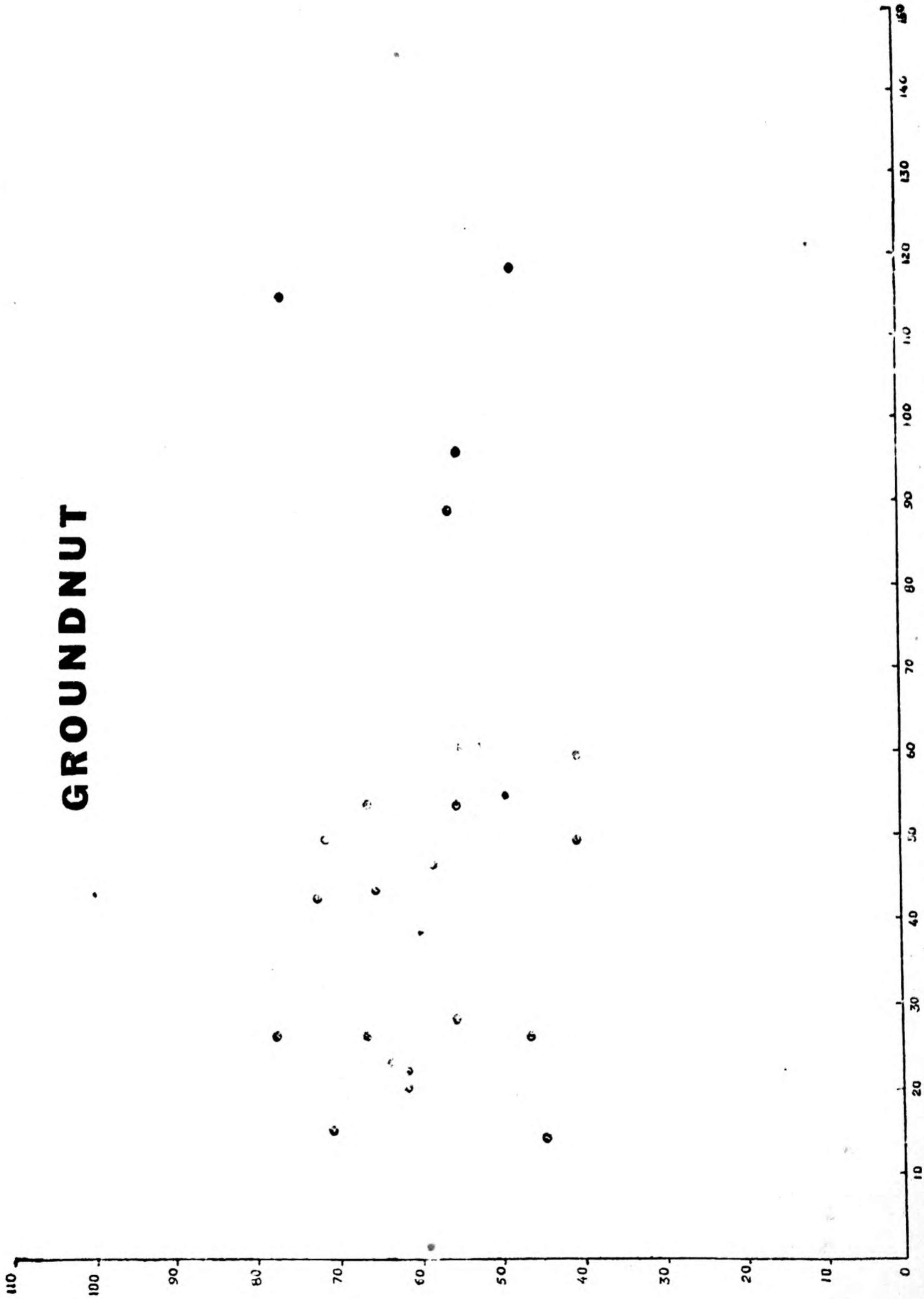


FIG. 4 : Correlation between the size of holding and the cost of production of Groundnut in Akola district.

VI — SUMMARY

A pilot enquiry was carried out in Akola District of Madhya Pradesh in 1952-53 for the estimation of physical quantities, such as human and bullock labour and materials like seed and manure required for the production of cotton and rotation crops, jowar and groundnut, together with the money equivalents of these quantities. An important aim of the enquiry was to obtain data for providing technical guidance in planning large-scale enquiries for the cost of production of crops.

Akola district was chosen for the enquiry because it is an important cotton growing area not only in Madhya Pradesh but in the black soil tract of Peninsular India as well. The six tehsils of the district were treated as strata and five villages were selected randomly from each. In each selected village two types of sample units, namely an operational holding and an individual field growing a particular crop, were selected for observation in order to compare their suitability and efficiency. Two holdings and two fields for each crop were selected randomly in the village. The field work in each village was entrusted to an experienced fieldman or kamdar from the agriculture department stationed locally on a whole-time basis for a period of 13 months. A set of proformas was prescribed for recording background information in regard to the selected villages and holdings, the daily operations in the fields under observation, the cattle maintenance account in the holdings and other information. It was observed that the average area of operational holdings in the sample was 39.73 acres including a fallow area of 4.9 acres. On an average 79 per cent. of the area of the holding was owned by the cultivator, the rest having been taken on lease. Of the area sown 41.4% was under cotton, 37.9% under jowar and 9.0% under groundnut.

The voluminous data resulting from the enquiry were analysed in order to estimate for the sample of holdings and fields separately the different items of the cost of cultivation for each crop. These included the amount of man, woman and bullock labour required per acre, its distribution among pre-sowing cultivation, sowing, post-sowing cultivation and weeding and harvesting and processing, and the money equivalents of these quantities. The quantities of seed and manure used per acre and their money equivalents were also estimated. Besides, land revenue, lease rent for fields that were taken on lease and the expenditure on implements used for cultivation were estimated from the sample of holdings only. The cost of bullock labour was also based on this sample. Crop-cutting on a random sampling basis was done in both samples in order to estimate the yield of each crop.

The various physical quantities estimated and their money values are given in considerable detail in the report. Broadly speaking it was observed that more man labour was required for jowar than cotton while for woman labour the reverse was true. Groundnut was intermediate although the pattern of distribution of labour for this crop followed cotton more closely. The amount of bullock labour required was almost the same for all the three crops. It was also observed that 60% of man labour and 85 to 90% of woman labour was hired while bullock labour was mostly owned, less than 10% being hired. Manuring was not common and of the area under cotton, which is manured more frequently than the other two crops, only 25% received any manure, mostly farmyard manure. Both for cotton and jowar, seed and manure form only a small part of the cost of cultivation, but for groundnut seed forms an appreciable component of the cost. Information on lease rent showed that this was an extremely variable

item, part of this variation being due to the fact that in many cases lease was taken on a crop-share basis and the money equivalent of the rent depended upon yield. The information on the cost of production for the three crops is summarized below :—

Cost of Production Rupees per acre

Sub-division of cost :	*Cotton*	*Jowar*	*Groundnut*
Human and bullock labour.	37.14	35.99	38.60
Seed, manure, implements, land revenue.	9.72	4.96	17.75
Lease rent.	4.77	9.16	16.56
Total :-	51.63	50.11	72.91

On the question of planning future enquiries, a good deal of information has been secured from the present pilot investigation. It is suggested that such enquiries may be planned for agricultural tracts comprising of groups of districts rather than for individual districts on account of the heavy cost involved. The holding would seem to be preferable to the field as observational unit and a sample of 30 villages with 4 holdings per village, which can be managed by one locally stationed investigator, is likely to give estimates of cost with reasonable precision, *i. e.*, with a standard error of about 5%.

The number of holdings to be observed per village may have to be altered depending upon their size and the number of crops under study. It is further suggested that in order to take into account seasonal fluctuation, the enquiry should be repeated for three years in a tract with a fresh sample of holdings and villages in each year in order to provide representative estimates for the tract.

TABLE 1.—LAND UTILISATION AND CROPPING

(Area in acres)

Tehsil	Village	Land utilisation: Total Geographical area	Forest	Land not available for cultivation	Culturable waste	Grazing lands	Tree crops and groves	Fallows	Net area sown	Cropping: Jowar	Cotton	Groundnut	Rest
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Akola	Masa	1455	0	47	0	201	0	298	909	355	273	151	130
	Redhwa	1631	248	49	0	34	0	144	1156	379	361	217	199
	Vairatrajapur	956	0	35	0	20	0	82	819	186	384	10	239
	Bhendikaji	498	0	12	0	24	0	39	423	110	166	52	95
	Kaulkhed	350	0	11	0	39	0	17	283	92	76	0	115
Murtizapur	Lodhipur	584	0	14	0	11	0	91	468	159	182	65	62
	Sultanpur	233	0	5	0	2	0	30	196	80	64	0	52
	Karli	1539	0	50	0	71	0	108	1310	446	459	200	205
	Mohogawan	1104	0	7	84	155	0	8	850	293	382	89	86
	Mohokhed	432	0	22	0	25	0	32	353	156	114	35	48
Akot	Lothkhed	1213	0	31	39	0	0	0	1143	335	440	0	368
	Sawargaon	1191	0	9	17	0	0	0	1165	361	518	104	182
	Mahmadabad	1162	0	17	39	0	0	0	1106	247	592	21	146
	Jainpurpimpri	897	0	3	4	0	0	42	848	211	543	0	94
	Marodi	1980	0	32	898	0	0	0	1050	253	673	0	124
Balapur	Pattiamrai	1026	0	90	0	0	0	36	900	214	404	115	167
	Khandala	3150	0	58	0	17	0	121	2954	870	1238	0	846
	Manki	2020	51	3	0	0	1	183	1782	657	769	130	226
	Nagod	1047	0	27	2	69	0	64	885	342	408	0	135
	Tulanga Kd.	1071	0	9	69	88	9	114	782	290	352	18	122
Basim	Chiwara	2229	0	58	0	209	0	244	1718	494	649	31	544
	Kajalamba	2371	0	3	135	122	0	107	2004	779	780	55	390
	Tapowan Kd.	365	0	11	0	49	0	27	278	69	95	0	114
	Kurha	2180	251	131	0	551	0	44	1203	471	478	193	61
	Krishna	2557	385	35	0	261	0	724	1152	417	406	128	201
Mangrulpir	Baldeo	580	0	20	0	9	0	85	466	201	137	38	90
	Pardi	1778	0	48	9	152	0	81	1488	449	522	82	435
	Pimpri Kd.	1842	0	59	10	421	0	58	1294	423	478	144	249
	Chondhi	467	0	20	79	0	0	46	322	111	93	56	62
	Mendara	5847	3452	164	211	60	15	638	1307	458	552	194	103
Mean		1458.5	146.2	36.0	53.2	86.3	0.8	115.4	1020.5	333.6	419.6	70.9	196.3
Columns 4 *to* 10 *as per-sent of Column* (3)			10.0	2.5	3.6	5.9	0.1	7.9	70.0				
Columns 11 *to* 14 *as per-sent of column* (10)										32.7	41.1	7.0	19.2

TABLE 2.—HUMAN AND CATTLE POPULATION

Tehsil	Village	Human Population						Cattle Population			
		Total	Men	Women	Children	Agricultural population	Non-Agricultural population	Draught bullocks	Cows	Buffaloes	Sheep and Goats
1	2	3	4	5	6	7	8	9	10	11	12
Akola	Masa	251	103	99	49	251	0	116	56	16	33
	Redhwa	434	188	153	93	426	8	124	66	18	43
	Vairatrajapur	413	157	172	84	413	0	95	63	26	57
	Bhendikaji	177	73	63	41	177	0	47	41	11	58
	Kaulkhed	182	74	62	46	182	0	62	29	14	36
Murtizapur	Lodhipur	27	14	11	2	27	0	6	9	0	0
	Sultanpur	39	16	8	15	39	0	12	8	2	12
	Karli	304	126	116	62	304	0	84	34	12	50
	Mohogawan	355	147	153	55	343	12	87	66	19	45
	Mohokhed	85	28	34	23	85	0	40	50	4	10
Akot	Lothkhed	319	119	128	77	314	5	44	31	12	9
	Sawargaon			—		omitted	—				
	Mahamadabad			—		not available	—				
	Jainpurpimpri	210	90	73	47	205	5	95	74	21	58
	Marodi	26	8	9	9	26	0		omitted		
Balapur	Pattiamrai			—		not available	—				
	Khandhala	1143	440	346	357	1083	60	303	145	37	201
	Manki	650	248	248	154	650	0	112	90	45	61
	Nagod	444	146	138	160	434	10	109	104	42	64
	Tulanga Kd.	493	170	172	151	493	0	104	126	14	104
Basim	Chiwara	859	389	333	137	796	63	248	187	43	43
	Kajalamba	870	354	329	185	854	16	251	123	39	107
	Tapowan Kd.	98	42	39	17	98	0	21	40	4	20
	Kurha	405	165	169	171	378	27	158	124	12	55
	Krishna	495	188	185	122	482	13	180	219	23	75
Mangrulpir	Baldeo	55	17	20	18	43	12	12	6	0	28
	Pardi	1026	455	397	174	915	111	241	183	93	154
	Pimpri Kd.	574	269	191	114	510	64	168	186	36	52
	Chondi	365	166	141	58	365	0	106	138	9	39
	Mendara	947	400	323	224	947	0	351	463	32	118
	Mean	416	—	—	—	401	15	122	102	22	59

TABLE 3—HOLDING INFORMATION.

*Area in acres and gunthas**

Tehsil	Serial No. of Village	Name of Village	Serial No. of holding	Name of Holder Selected	1951-52 Holding	Addition	Reduction	Area out side Village	1952-53 Holding	According to title of operation		According to Crops			Other crops	Total cropped	Fallow	No. of Bullock pairs	Family Members of Holder		
										Owned	Taken on lease	Jowar	Cotton	Groundnut					Men	Women	Children
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Akola	1	Masa	1	Sitaram Kondaji	76-25	6-7		31-23	114-15	114-15		52-21	32-28	9-14	5-32	100-15	14-00	6	2	2	1
			2	Vishwanath Uttam Rao	7-9	19-26		1-0	27-35	7-9	20-26	14-36	2-27	6-0	1-38	25-21	2-14	1	3	4	3
	2	Redhwa	3	Pundlik Govind	16-19				16-19	16-19		8-38	4-00			12-38	3-21	1	1	1	–
			4	Gyanu Udebhan	5-12				5-12	5-12		2-11	2-35		0-2	5-8	0-4	1	2	2	1
	3	Vairatrajapur	5	Mahadeo Pundlik	13-0	4-0		11-30	28-36	28-36		12-11	11-1			23-12	5-24	1	2	2	1
			6	Shioram Ganpat	2-2			5-17	7-19	5-14	2-5	2-23	1-14		3-19	7-16	0-3	1	2	3	1
	4	Bhendikaji	7	Kalwathi Bai w/o Govind Rao	53-25				53-25	58-25		18-23	26-23	4-9	0-19	49-34	3-31	2	3	2	2
			8	Govind Rao Hanguji	25-2	37-33	6-7		56-28	32-21	24-7	22-13	15-5	17-0		54-18	2-10	2	4	5	4
	5	Kaulkhed	9	Sonaji Raiji	10-14		4-16		5-38	5-38		1-2	2-14		1-28	5-4	0-34	1	3	4	3
			10	Rambhao Pundlik	48-9	8-0			56-9	56-9		13-17	19-34		22-0	55-11	0-38	2	4	3	2
Murtizapur	6	Lodhipur	11	Pundlik Sakharam	36-2			7-0	43-2	21-20	21-22	14-7	20-37	1-20		36-24	6-18	1	2	2	2
			12	Shamrao Karnaji	22-36				22-36	22-36		11-11	9-12	0-11		20-34	2-2	1	2	2	2
	7	Sultanpur	13	Hazarimal Chhotumal	27-36	59-12			87-8	82-34	4-14	17-15	29-11		24-4	70-30	16-18	4	2	1	1
			14	Ramchand Panduji	14-12				14-12		14-12	2-22	5-17		4-3	12-2	2-10	1	2	0	–
	8	Karli	15	Namdev Hiraji	24-25	24-11			48-36	29-36	19-0	13-29	22-17	9-7		45-13	3-23	2	3	2	1
			16	Deoba Tukaram	2-27	46-5			48-32	2-27	46-5	23-14	10-25	11-6	1-18	46-23	2-9	2	4	2	2
	9	Mohogawan	17	Govind Bhopaji	21-31	24-21			46-12	34-23	11-29	18-0	22-4	3-26		43-30	2-22	2	2	1	1
			18	Bhagwan Baliram	27-16		13-1		14-15	2-17	11-38		7-14	5-5		12-19	1-36	1	3	3	2
	10	Mohokhed	19	Nathu Narsing	47-1	48-8			95-9	95-9		42-3	21-8	14-36		78-7	17-2	6	1	2	–
			20	Hari Krishnaji	66-38	20-24			87-22	87-22		17-22	34-16	24-33	7-32	84-23	2-39	9	1	2	–
Akot	11	Lothkhed	21	Ayubkhan Bismillakhan	3-9	1-16			4-25	3-9	1-16	0-23	3-30			4-13	0-12	–	3	1	1
			22	Pandhari Ramji	4-1				4-1	4-1		1-27	2-14			4-1		–	1	1	–
	12	Sawargaon	23	Rambhao Vithuji	5-16	27-4			32-20	16-18	16-2	13-19	15-1		4-0	32-20		1	4	2	2
			24	Shaligram Vishnaji	7-0	8-16			15-16	15-16		7-15	8-0			15-15	0-1	1	3	1	1
	13	Mahamadabad	25	Asru Eknath	13-2	21-7	3-12		30-37	30-37		4-21	22-35		2-29	30-5	0-32	2	1	3	2
			26	Kashiram Pandhari	6-22	15-15			21-37	6-22	15-15	7-30	10-22	1-0	1-6	20-18	1-19	1	1	1	–
	14	Jainpurpimpri	27	Dnyandeo Pundlik	57-10	8-18	17-25		48-3	19-24	28-19	13-29	22-5		6-3	41-37	6-6	3	3	2	1
			28	Laxman Nathu	3-2				3-2	3-2		1-21	1-9		0-12	3-2		–	1	2	1
	15	Marodi	29	Nathu Sampat	3-35			41-20	45-15	45-15		1-1	36-32		6-14	44-7	1-8	2	1	1	1
			30	Rahimat Ullekhan	2-0				2-0	2-0		1-18			0-6	1-24	0-16	–	3	3	3
Balapur	16	Pattiamrai	31	Narayan Sadu	4-36	10-20			15-16	4-34	10-22		14-36		0-17	15-13	0-3	1	1	1	1
			32	Govind Bhagavan	2-36	23-24			26-20		26-20	3-25	5-19	11-20	0-6	20-30	5-30	–	4	4	3
	17	Khandala	33	Narayanan Chinkaji	9-28	19-14			29-2	26-8	2-34	13-3	9-12		6-23	28-38	0-4	2	1	1	1
			34	Vishwanath Hari	29-33	13-31			43-24	29-38	13-31	16-31	19-0		4-33	40-24	3-0	1	2	1	–
	18	Manki	35	Bhagwan Ramachandra	9-0		1-22		7-18	7-18		2-12	2-36	0-5	0-14	5-27	1-31	1	1	2	1
			36	Pandhari Parasharam	2-33				2-33		2-33	0-2	2-8		0-3	2-13	0-20	–	2	2	2
	19	Nagod	37	Amrut Pandurang	101-18		17-0	67-24	152-2	152-2		47-23	64-13		29-30	141-26	10-16	7	3	3	4
			38	Yadao Sampat	12-9	42-10		12-0	66-19	51-36	14-23	22-32	31-39		10-8	64-39	1-20	6	2	2	1
	20	Tulanga Kd.	39	Sampat Sakharam	3-3				3-3	3-3		1-27	0-37		0-19	3-3		–	2	1	3
			40	Raibhan Sambhu	4-16				4-16	4-16		1-6	2-24		0-26	4-16		1	2	2	2

* Guntha = $\frac{1}{40}$ acre.

*Area in acres and gunthas.**

Tehsil	Serial No.	Name of Village	Serial No.	Name of Holder	51–52 Holding	Addition	Reduction	Area outside the Village	52–53 Holding	According to title of operation		According to Crops			Other crops	Total cropped.	Fallow	No. of Bullock pairs	Family Members		
										Owned	Taken on lease	Jowar	Cotton	Groundnut					Men	Women	Children
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Basim	21	Chiwara	41	Babu Rao Sadu	14–9	68–14			82–23	78–12	4–11	16–22	27–25		27–20	71–27	10–36	3	3	2	2
			42	Malangbeg Chotubeg	12–19	13–11			25–30	25–19	0–11	5–36	7–18	1–10	8–36	23–20	2–10	2	3	1	3
	22	Kajalamba	43	Mahipati Maroti	32–21	22–0	21–9		33–12	10–7	23–5	21–37	7–22		2–7	31–26	1–26	1	1	1	1
			44	Demaji Deoji	15–21	0–10		10–0	25–31	17–19	8–12	6–0	12–0	4–0	1–14	23–14	2–17	2	3	4	3
	23	Tapowan. Kd.	45	Dnyanoba Mahadaji	2–24	32–0			34–24	4–24	30–0	6–19	17–5		4–20	28–4	6–20	1	4	1	1
			46	Hari Raghoji	9–28	18–26			28–14	3–0	25–14	4–20	12–20		11–7	28–7	0–7	1	1	1	–
	24	Kurha	47	Ramadaulath & Kisankadtu	10–26	42–26			53–12	53–12		19–0	18–20	3–23	10–2	51–5	2–7	2	1	2	1
			48	Tukaram Narayan	14–31				14–31	14–31		6–0	4–25	1–20	1–19	13–24	1–7	1	1	1	–
	25	Krishna	49	Tulsiram slo Ramji	63–32			53–37	117–29	117–29		34–0	24–0	6–0	15–3	79–3	38–26	4	2	4	3
			50	Naoji Fakirya	19–39				19–39	19–39		4–0	2–0	1–30	0–10	8–0	11–39	1	1	–	–
Mangrulpir	26	Baldeo	51	Aba Nimbaji	36–25		5–6	21–37	53–16	40–37	12–19	18–0	22–30	12–0	0–26	53–16		4	1	1	1
			52	Shriram Laxman	15–32				15–32	15–32		15–32				15–32		1	4	3	4
	27	Pardi	53	Vithu Satwaji	0–32	20–21			21–13	0–32	20–21	8–1	5–4		5–32	18–37	2–16	1	1	1	1
			54	Tukaram Kewaji	23–22				23–22	23–22		9–12	12–16		1–16	23–4	0–18	1	4	4	3
	28	Pimpri Kd.	55	Jairam Hambirji	40–9	2–11			42–20	39–39	2–21	15–0	8–10	2–0	1–30	27–0	15–20	2	4	2	3
			56	Govind Shamji	17–22		0–11		17–11	17–11		8–12	7–0	0–10	1–0	16–22	0–29	1	1	1	1
	29	Chondhi	57	Motiram Govind & Gunaji Govind	59–38			148–30	208–28	186–13	22–15	95–25	51–0	14–0	2–19	163–4	45–24	10	2	2	2
			58	Laxman Suryabhan	3–23	8–7			11–30	3–23	8–7	4–4	2–0	4–3	1–23	11–30		1	3	4	1
	30	Mendara	59	Parashram Dewaji	23–10			36–9	59–13	41–13	18–0	13–3	28–3	5–2		46–8	13–5	4	2	1	1
			60	Dasru Raghoji	16–27	37–15			54–2	33–31	20–11	9–0	18–0	12–20	0–34	40–14	13–28	3	2	1	1
		Mean			21–6	12–24	1–20	7–19	39–29	31–12	8–17	13–8	14–18	3–5	4–2	34–33	4–36				
									(10) & (11) as% of (9)	78.8	21.2										
										(12) to (15) as% of (16)		37.9	41.4	9.0	11.7						

* Guntha = $\frac{1}{40}$ acre.

TABLE 4.—AVERAGE NUMBER OF MAN HOURS PER ACRE OF COTTON FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil.	No. of fields.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES.		
		Pre-sowing.	Sowing.	Post-Sowing.	Har-vesting.	Miscel-laneous.	Total.	Paid.	Unpaid.	Total money value.	Paid money value.	Unpaid money value.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Holding Sample												
Akola	17	40.87	8.63	31.11	3.30	0.18	84.07	50.16	33.91	9.67	5.79	3.88
Murtizapur	28	20.13	7.38	34.67	3.97	1.43	77.59	45.90	31.69	10.41	6.46	3.95
Akot	22	40.24	11.43	28.28	3.39	4.48	87.82	62.96	24.86	12.63	9.01	3.62
Balapur	21	41.55	6.81	22.40	2.92	0.14	73.82	48.70	25.12	9.36	6.40	2.96
Basim	25	42.55	7.32	26.30	1.34	0.99	78.50	27.31	51.19	8.48	2.83	5.65
Mangrulpir	18	51.39	9.69	33.11	2.96	1.23	98.38	67.41	30.97	12.98	8.84	4.14
District	131	40.34	8.43	29.35	2.98	1.46	82.57	49.17	33.40	10.50	6.42	4.08
Cols. 3 to 7 and 9 and 10 as%of col. 8.		48.8	10.2	35.6	3.6	1.8	S.E. 4.64 i.e. 5.6%	59.5	40.4	Cols. 12 and 13 as % of Col. 11.	61.1	38.8
Field Sample												
Akola	8	60.64	9.87	26.69	7.15	3.25	107.61	79.51	28.10	12.90	9.92	2.98
Murtizapur	10	40.36	8.42	24.06	0.61	..	73.45	52.83	20.62	9.56	6.94	2.62
Akot	10	27.21	10.91	23.73	10.56	2.71	75.12	54.51	20.61	10.98	8.08	2.90
Balapur	7	22.16	5.75	18.20	2.41	8.93	57.44	44.72	12.72	7.40	5.96	1.44
Basim	10	67.28	8.64	27.52	0.46	2.40	106.29	57.92	48.37	10.33	5.59	4.74
Mangrulpir	10	54.33	8.71	31.27	1.98	3.20	99.49	66.24	33.25	11.82	7.79	4.03
District	55	46.04	8.84	25.58	4.13	2.81	87.39	59.35	28.04	10.57	7.36	3.21
Cols. 3 to 7 and 9 and 10 as%of col. 8.		52.7	10.1	29.3	4.7	3.3	S.E. 7.57 i.e. 8.7 %	67.9	32.1	Cols.12 and 13 as %of Col. 11.	69.6	30.4

TABLE 5.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL MAN-HOURS PER ACRE OF COTTON.

Holding Sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	1573.03
Villages	23	2816.78
Holdings	27	1576.84
Fields	75	864.19

Field Sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	3607.38
Villages	22	3153.08
Fields	27	1938.17

TABLE 6.—AVERAGE NUMBER OF WOMAN HOURS PER ACRE OF COTTON FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	WOMAN LABOUR IN HOURS						MONEY VALUE IN RUPEES					
	No. of fields	Pre-sowing	Sowing	Post-Sowing	Har-vesting	Miscel-laneous.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Holding Sample												
Akola	17	20.54	4.67	49.39	63.24	..	137.85	115.08	22.75	10.34	8.30	2.04
Murtizapur	28	20.05	5.48	51.36	45.76	..	122.65	102.46	20.19	10.08	8.39	1.69
Akot	22	34.76	0.19	41.78	43.88	..	120.61	113.63	6.98	10.98	10.36	0.62
Balapur	21	23.36	0.90	49.75	34.11	..	108.12	87.51	20.61	7.00	5.40	1.60
Basim	25	14.06	5.02	48.43	52.18	..	119.69	95.39	24.30	7.62	6.16	1.46
Mangrulpir	18	19.56	7.00	54.69	60.34	..	141.60	133.27	8.33	11.45	10.77	0.68
District	131	21.90	3.87	49.13	49.08	..	123.99 S.E. 7.88 i.e. 6.4%	106.46	17.53	9.49 Cols.12and 13 as % of Col. 11.	8.13	1.36
Cols. 3 to 7 and 9 and 10 as % of Col. 8.		17.7	3.1	39.6	39.6	..		85.9	14.1		85.7	14.3
Field Sample							128.46	112.81	15.65	10.42	8.42	2.00
Akola	8	24.49	2.85	60.09	41.04	..	120.62	111.48	9.14	10.77	10.01	0.76
Murtizapur	10	15.54	2.80	41.48	60.80	..	172.09	171.24	0.85	13.54	13.47	0.07
Akot	10	29.88	2.08	80.43	59.70	..	107.69	93.31	14.38	6.83	5.80	1.03
Balapur	7	24.14	0.83	54.85	27.90	..	148.16	111.82	36.34	9.91	6.84	2.07
Basim	10	30.35	4.78	72.94	40.09	..	164.28	156.90	7.38	11.82	11.06	0.75
Mangrulpir	10	38.28	7.36	67.24	51.40	..	142.42	128.55	13.87	10.57	9.49	1.08
District	55	27.37	3.61	63.37	48.06	..	S.E. 8.74 i.e. 6.3%	90.3	9.7	Cols. 12 and 13 as % of col. 11.	89.8	10.2
Cols. 3 to 7 and 9 and 10 as %of Co. 8.		19.2	2.5	44.5	33.8							

TABLE 7.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL WOMAN-HOURS PER ACRE OF COTTON.

Holding Sample

Due to	Degrees of freedom	Mean square
Tehsils	5	2977.42
Villages	23	8086.97
Holdings	27	3003.47
Fields	75	2327.94

Field Sample

Due to	Degrees of freedom	Mean square
Tehsils	5	5732.56
Villages	22	4718.54
Fields	27	4626.69

TABLE 8.—WAGE *RATES IN RUPEES PER HOUR FOR COTTON.

Tehsil and Village	Pre-sowing		Sowing		Post Sowing		Harvesting	
	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour
Akola								
Masa	0.12080	0.07537	0.12480	0.10200	0.11500	0.06272	0.04167	0.05996
Redhwa	0.12880	0.08045	0.13770	0.12060	0.12370	0.08844	0.09593	0.09917
Vairatrajapur	0.12880	0.06810	0.12600	..	0.11880	0.05920	..	0.05777
Bhendikaji				omitted				
Kaulkhed	0.09026	0.06019	0.11050	..	0.10240	0.08313	0.12380	0.17060
Murtizapur								
Lodhipur	0.10890	0.08451	0.13320	0.06771	0.11840	0.06067	0.12500	0.10830
Sultanpur	0.14980	0.07571	0.16860	0.09896	0.14180	0.05835	0.10260	0.08550
Karli	0.10520	0.08002	0.13150	0.08333	0.15350	0.06060	..	0.09850
Mohogawan	0.11170	0.05614	0.12160	0.06673	0.13140	0.06649	0.04167	0.10770
Mohokhed	0.15810	0.10210	0.15030	0.12500	0.19070	0.10520	0.19630	0.12660
Akot								
Lothkhed	0.12370	0.08700	0.12520	..	0.11180	0.05383	0.09141	0.09297
Sawargaon	0.17510	0.10920	0.15610	0.07500	0.14310	0.04858	0.07091	0.05636
Mahamadabad	0.13060	0.07388	0.14600	0.12500	0.12080	0.04702	0.14280	0.08905
Jainpurpimpri	0.14670	0.12180	0.21090	0.08333	0.21970	0.17780	0.11610	0.08972
Marodi	0.11540	0.08525	0.15220	0.04464	0.11760	0.07990	0.12500	0.07418
Balapur								
Pattiamrai	0.14190	0.02951	0.16640	0.11610	0.16140	0.06168	..	0.12270
Khandala	0.11560	0.09038	0.19130	..	0.15940	0.04582	..	0.09240
Manki	0.13270	0.06899	0.12580	..	0.11790	0.04950	..	0.07035
Nagod	0.12860	0.09077	0.12040	..	0.12300	0.04025	0.09570	0.05638
Tulanga	0.09409	0.05227	0.17840	..	0.12400	0.04569	0.09344	0.09624
Basim								
Chiwara	0.09280	0.07810	0.12330	0.07925	0.10800	0.04024	..	0.11460
Kajalamba	0.10380	0.04325	0.09250	0.06652	0.09079	0.04013	..	0.10770
Tapowan Kd.	0.12130	0.06959	0.19640	0.09505	0.11020	0.04767	..	0.05866
Kurah	0.08743	0.05512	0.10880	0.06102	0.09913	0.07564	0.08108	0.08226
Krishna	0.08516	0.04145	0.10420	0.05208	0.16980	0.05403	..	0.08697
Mangrulpir								
Baldeo	0.09796	0.06643	0.12440	0.11090	0.12300	0.07908	0.10910	0.07873
Pardi	0.12920	0.05192	0.11790	0.06250	0.11450	0.04618	..	0.10410
Pimpri Kd.	0.10420	0.06370	0.16670	..	0.16750	0.06056	..	0.12510
Chondhi	0.10220	0.04451	0.12350	0.07230	0.13520	0.05176	..	0.11560
Mendara	0.15370	0.06063	0.10310	0.06018	0.11540	0.07403	..	0.11770

*Although wages are paid both in cash and kind on a daily basis or on a contract basis, wage rates are shown in rupees per hour in this and tables 19 and 27 for uniformity and case of conversion of labour hours into money value.

TABLE 9.—AVERAGE NUMBER OF BULLOCK HOURS PER ACRE OF COTTON FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	No. of fields	BULLOCK LABOUR IN HOURS.								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc	Total	Paid	Unpaid	Total money value	Paid money value	unpaid money value
1	2	3	4	5	6	7	8	9	10	11	12	13
Holding Sample												
Akola	17	29.48	6.52	15.43	..	..	51.43	1.32	50.11	18.04	06.2	17.42
Murtizapur	28	21.72	5.44	14.52	..	..	41.68	1.76	40.68	14.82	0.68	14.14
Akot	22	19.23	5.88	9.07	0.38	..	34.56	6.64	27.92	12.35	2.64	9.71
Balapur	21	19.96	2.98	8.80	..	..	31.73	4.86	26.87	11.17	1.83	9.34
Basim	25	31.84	5.95	10.92	0.03	..	48.74	1.00	47.74	17.00	0.40	16.60
Mangrulpir	18	40.15	8.27	19.33	0.50	..	68.26	2.74	65.52	23.71	0.93	22.78
District	131	26.53	5.74	12.91	0.14	..	45.32	3.01	42.31	15.88	1.17	14.71
Cols 3 to 7 and 9 and 10 as % of. col. 8		58.5	12.7	28.5	0.3		S.E. 3.59 i.e.7.9 %	6.6	93.3	Cols.12 & 13as% of col. 11	7.4	92.6
Field Sample												
Akola	8	34.53	5.50	12.64	..	0.46	53.14	4.71	48.43	18.80	1.96	16.84
Murtizapur	10	28.53	5.27	11.32	..	..	45.12	3.17	41.95	15.61	1.04	14.57
Akot	10	14.74	4.95	9.28	0.15	..	29.11	5.06	24.05	10.57	2.21	8.36
Balapur	7	14.68	3.86	8.25	..	0.35	27.14	1.73	25.41	9.44	0.60	8.84
Basim	10	50.75	6.79	12.83	..	0.04	70.41	..	70.41	25.91	..	25.91
Mangrulpir	10	38.50	7.69	11.05	0.16	3.66	61.07	11.11	49.96	21.85	4.48	17.37
District	55	30.99	5.78	10.98	0.06	0.78	49.36	5.25	44.11	17.42	1.80	15.62
Cols 3 to 7 and 9 and 10 as % of col. 8		62.8	11.7	22.2	0.1	1.6	S.E. 5.25 i.e.10.6 %	10.6	89.4	Cols.12 & 13as% of col. 11	10.3	89.7

TABLE 10.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL BULLOCK-HOURS PER ACRE OF COTTON

Holding Sample

Due to	Degrees of freedom	Mean square
Tehsils	5	3437.28
Villages	23	1000.51
Holdings	27	766.81
Fields	75	318.57

Field Sample

Due to	Degrees of freedom	Mean square
Tehsils	5	2694.80
Villages	22	1528.54
Fields	27	752.85

TABLE 11.—COSTS OTHER THAN LABOUR INCLUDING MATERIALS IN RUPEES PER ACRE OF COTTON.

Tehsil	No. of fields	SEED		Manure	Watch	Taxes	No. of fields taken on lease	Average lease rent	Lease rent distributed over the entire sample.	Implements
		Quantity in lbs.	Money value							
1	2	3	4	5	6	7	8	9	10	11
Holding Sample										
Akola	17	16·13	1·99	3·42	0·21	2·66	1	20·00	·18	0·73
Murtizapur	28	14·32	1·69	3·04	0·20	1·70	9	16·00	5·14	0·71
Akot	22	11·99	1·73	7·92	0·43	3·97	7	21·71	6·91	0·53
Balapur	21	11·18	1·43	5·00	0·17	2·54	8	20·54	7·83	0·47
Basim	25	13·23	1·80	2·22	..	1·01	5	30·73	6·14	0·77
Mangrulpir	18	17·54	1·26	12·85	..	1.28	2	55·60	6·18	0·72
District	131	13·89	1·65	5·41	0·17	2·15	32	23·29	5·69	0·66
Field Sample										
Akola	8	14·50	1·87	2·70			Not recorded			
Murtizapur	10	13·95	1·85	3·15						
Akot	10	10·27	1·75	6·23						
Balapur	7	10·42	1·45	4·22						
Basim	10	15·60	2·06	..						
Mangrulpir	10	15·99	1·75	4·00						
District	55	13·47	1·79	3·36						

TABLE 12.—AVERAGE OUTTERN PER ACRE OF COTTON (SEED COTTON IN LB.)

Tehsil.	*Holding Sample*	*Field Sample*		
	Produce reported by farmer.	Estimated produce from crop cutting experiments.	Estimated produce from crop cutting experiments.	Average from the combined sample by crop cutting experiments.
Akola	175.34 (17)*	159.74 (8)	153.64 (8)	156.69 (16)
Murtizapur	161.45 (28)	238.49 (10)	250.70 (8)	243.92 (18)
Akot	217.32 (12)	158.78 (8)	230.91 (10)	198.85 (18)
Balapur	168.68 (21)	215.48 (10)	185.42 (9)	201.24 (19)
Basim	260.74 (25)	350.74 (10)	206.23 (10)	278.48 (20)
Mangrulpir	133.11 (18)	261.88 (9)	215.71 (9)	238.80 (18)
District	186.50 (121)	235.49 (55)	207.71 (54)	221.72 (109)

*Figures in brackets refer to number of fields on which per acre value is based

TABLE 13.—TOTAL EXPENDITURE AND ITS DISTRIBUTION IN RUPEES PER ACRE OF COTTON.

Tehsil	No. of fields	Man labour	Woman labour	Bullock labour	Seed	Manure	Taxes	Lease Rent	Watch	Imple-ments	Total
1	2	3	4	5	6	7	8	9	10	11	12
Holding Sample											
Akola	17	9·67	10·34	18·04	1·99	3·42	2·66	1·18	0·21	0·73	48·24
Murtizapur	28	10·41	10·08	14·82	1·69	3·04	1·70	5·14	··20	0·71	47·79
Akot	22	12·63	10·98	12·35	1·73	7·92	3·97	6·91	0·43	0·53	57·45
Balapur	21	9·36	7·00	11·17	1·43	5·00	2·54	7·83	0·17	0·47	44·97
Basim	25	8·48	7·62	17·00	1·80	2·22	1·01	6·14	..	0·77	45.04
Mangrulpir	18	12·93	11·45	23·71	1·26	12·85	1·28	6·18	..	0·73	70.44
District	131	10·50	9·49	15·88	1·65	5·41	2·15	5·69	0·17	0·66	51·61
Field Sample											
Akola	8	12·90	10·42	18·80	1·87	2·70			..	Not Recorded	46·69
Murtizapur	10	9·56	10·77	15·61	1·85	3·15	Not	Recorded	..		40·94
Akot	10	10·98	13·54	10·57	1·75	6·23			..		43·07
Balapur	7	7·40	6·83	9·44	1·45	4·22			..		29·34
Basim	10	10·33	8·58	25·91	2·06	..			..		46·88
Mangrulpir	10	11·82	11·82	21·85	1·75	4·00			..		51·24
District	55	10·57	10·51	17·39	1·79	3·36			..		43·62
										Taxes ..	+ 2·15
										Rent ..	+ 5·69
										Implements	+ 0·66
											52.12

TABLE 14.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF MONEY VALUE PER ACRE OF COTTON

Holding sample

Due to	Degrees of freedom	Total money value	Components common to holding and field samples.	Components estimated in holding sample only.
		Mean square		
Tehsils	5	803.02	810.96	119.90
Villages	23	687.60	643.99	355.92
Holdings	27	452.24	303.53	159.47
Fields	75	310.34	251.49	101.53

Field sample

Due to	Degrees of freedom	Mean square
Tehsils	5	460.53
Villages	22	558.33
Fields	27	450.89

TABLE 15.—AVERAGE NUMBER OF MAN HOURS PER ACRE OF JOWAR FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	MAN LABOUR IN HOURS									MONEY VALUE IN RUPEES		
	No. of fields	Pre-Sowing	Sowing	Post sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money value
1	2	3	4	5	6	7	8	9	10	11	12	13
Holding Sample												
Akola	17	51·31	9·70	19·95	42·83	0·50	124·29	77·12	47·17	16·90	10·05	6·85
Murtizapur	16	19·03	8·37	21·44	41·16		90·00	63·77	26·23	12·40	8·77	3·63
Akot	14	34·28	9·97	28·52	37·21	1·62	111·62	75·20	36·41	16·92	11·85	5·06
Balapur	13	38·93	7·47	17·54	26·06		90·00	65·23	24·77	11·82	8·80	3·02
Basim	29	34·74	8·76	22·05	38·38		103·93	37·87	66·06	13·64	5·48	8·15
Mangrulpir	23	36·67	9·55	22·68	51·65		120·54	97·67	22·87	16·31	13·02	3·29
District	112	35·84	9·01	22·06	40·60	0·28	107·79	67·65	40·13	14·69	9·37	5·33
Cols. 3 to 7 and 9 and 10 as % of col. 8		33·2	8·4	20·5	37·7	0·20	S.E. 4·85 i.e. 4·5%	62·77	37·23	Cols. 12 and 13 as % of Col. 11	63·8	36·2
Field Sample												
Akola	8	55·76	8·14	25·00	42·93	1·52	133·34	84·00	49·34	17·28	10·78	6·49
Murtizapur	10	27·09	10·22	21·24	35·57		94·12	63·15	30·97	13·98	10·13	3·85
Akot	10	36·10	8·62	17·18	24·54		86·43	59·87	26·57	13·38	9·64	3·74
Balapur	10	33·29	5·31	15·78	27·68		82·07	46·55	35·52	10·73	6·28	4·51
Basim	10	23·92	9·74	21·09	36·19		90·94	35·66	55·28	11·73	4·53	7·19
Maugrulpir	10	42·57	8·34	20·97	38·03	0·87	110·77	70·58	40·18	16·48	11·69	4·58
District	58	35·79	8·40	20·04	33·85	0·36	98·45	59·14	39·31	13·81	8·80	5·01
Cols. 3 to 7 and 9 and 10 as % of col. 8.		36·3	8·5	20·4	34·4	0·4	S.E. 5·73 i.e. 5·82	60·1	39·9	Cols. 12 and 13 as % of Col. 11	63·7	36·3

TABLE 16.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL MAN HOURS PER ACRE OF JOWAR.

Holding Sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	3636.38
Village	22	2637.99
Holdings	25	2313.00
Fields	59	2010.72

Field Sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	3227.18
Villages	23	1883.03
Fields	29	786.78

TABLE 17.—AVERAGE NUMBER OF WOMAN HOURS PER ACRE OF JOWAR FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	No. of fields	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money value
1	2	3	4	5	6	7	8	9	10	11	12	13
Holding Sample												
Akola	17	16·26	0·94	18·50	15·86	—	51·58	40·60	10·98	3·99	3·16	0·83
Murtizapur	16	11·26	1·15	25·00	16·38	—	53·80	47·78	6·02	4·60	4·16	0·44
Akot	14	31·72	—	45·46	8·05	—	85·24	82·06	3·17	7·40	7·16	0·24
Balapur	13	22·56	—	39·71	13·62	—	75·89	71·96	3·93	5·51	5·11	0·40
Basim	29	23·19	2·86	15·80	19·31	—	61·16	45·69	15·47	4·66	3·26	1·04
Mangrulpir	23	13·00	1·93	31·89	25·24	—	72·07	70·32	1·74	5·35	5·22	0·12
District	112	19·33	1·44	27·32	17·52	—	65·61	57·87	7·74	5·13	4·57	0·56
Cols. 3 to 7 and 9 and 10 as %of col. 8		29·5	2·2	41·5	26·7	—	S.E. 4·69 i.e. 7·15%	88·2	11·8	Cols. 12 & 13 as % of Col. 11	89·1	10·9
Field Sample												
Akola	8	30·26	0·89	21·80	17·68	—	70·64	68·73	1·90	5·32	5·20	0·12
Murtizapur	10	23·81	0·94	28·76	16·89	—	70·40	62·98	7·42	6·01	5·39	0·62
Akot	10	42·20	—	18·48	7·35	—	68·04	62·55	5·49	5·35	4·76	0·59
Balapur	10	22·92	1·50	29·59	7·93	—	61·93	55·38	6·55	3·69	3·21	0·48
Basim	10	20·13	1·39	16·76	20·26	—	58·55	51·46	7·08	4·56	4·00	0·56
Mangrulpir	10	24·04	2·73	38·46	23·40	—	88·63	87·23	1·40	7·32	7·14	0·18
District	58	27·12	1·25	25·77	15·51	—	69·66	64·58	5·08	5·38	4·94	0·44
Cols. 3 to 7 and 9 and 10 as % of col. 8		38·9	1·8	37·0	22·3	—	S.E. 7·40 i.e. 10·6%	92·7	7·3	Cols. 12 & 13 as % of col. 11	91·8	8·2

TABLE 18.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL WOMAN HOURS PER ACRE JOWAR.

Holding Sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	2775.49
Villages	22	2465.36
Holdings	25	965.95
Fields	59	1846.48

Field Sample

Tehsils	5	1094.02
Villages	23	3172.55
Fields	29	668.49

TABLE 19.—WAGE RATES IN RUPEES PER HOUR FOR JOWAR.

Tehsil and village.	PRE-SOWING		SOWING		POST SOWING		HARVESTING	
	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour
Akola								
Masa	0·12180	0·07424	0·09937	0·08965	0·09921	0·05749	0·18150	0·09519
Redhwa	0·13720	0·08624	0·13290	0·10810	0·11690	0·09483	0·20020	0·09744
Vairatrajapur..	0·11830	0·06211	0·12500	..	0·12310	0·06184	0·21620	0·12500
Bhendikaji	..	..	..	..	..	..	..	..
Kaulkhed	0·10820	0·06081	0·11410	..	0·10610	0·06059	0·11070	0·06811
Murtizapur								
Lodhipur	0·11700	0·08075	0·14320	0·06731	0·11240	0·03389	0·11960	0·09105
Sultanpur	0·15790	0·06523	0·17540	0·08333	0·14600	0·05718	0·14710	0·15680
Karli	0·13610	0·08333	0·13550	..	0·13920	0·06798	0·18820	0·10930
Mohogawan	0·12530	0·81090	0·11760	0·10650	0·11740	0·07230	0·17660	0·12320
Mohokhed	0·15260	0·09638	0·14840	0·13970	0·15530	0·10940	0·12390	0·10040
Akot								
Lothkhed	0·15490	0·09701	0·12760	..	0·14090	0·07217	0·14060	0·12800
Sawargaon	0·13900	0·13640	0·14920	..	0·14380	0·05654	0·10060	0·13980
Mahamadabad	0·12060	0·10170	0·18040	..	0·13140	0·05400	0·19220	0·12860
Jainpurpimpri	0·15040	0·06143	0·19990	..	0·21880	0·09723	0·15550	0·07979
Marodi	0·13750	0·05469	0·11410	..	0·15250	0·10710	0·12070	..
Balapur								
Pattiamrai	0·14200	0·05441	0·17130	..	0·18790	0·06525	0·25340	0·10850
Khandala	0·11050	0·09143	0·17330	0·05000	0·15790	0·04622	0·14220	0·11470
Manki	0·09016	0·08076	0·10000	0·10000	0·09570	0·05961	0·12460	0·05000
Nagod	0·13330	0·07746	0·13160	..	0·12220	0·04820	0·11070	0·12600
Tulanga	0·09935	0·05125	0·14790	..	0·10620	0·03230	0·14020	0·06250
Basim								
Chiwara	0·10000	0·08586	0·10860	0·07452	0·15020	0·04688	0·13360	0·11190
Kajalamba	0·10210	0·04401	0·09062	0·05833	0·09190	0·03690	0·17590	0·12040
Tapowan Kd...	0·14580	0·06016	0·09148	0·08928	0·10660	0·06152	0·15550	0·06628
Kurha	0·08973	0·05019	0·11780	0·03598	0·11610	0·09689	0·14220	0·09430
Krishna	0·08593	0·04117	0·10780	0·05357	0·17780	0·05355	0·19160	0·10930
Mangrulpir								
Baldeo..	0·15560	0·06120	0·12790	0·09418	0·14080	0·08137	0·12850	0·09908
Pardi	0·10480	0·05366	0·10580	0·05556	0·08725	0·04560	0·13700	0·08194
Pimpri Kd.	0·10670	0·06715	0·18640	0·08333	0·14520	0·10940	0·20970	0·12190
Chondhi	0·09133	0·06426	0·07159	0·05194	0·10510	0·04365	0·16360	0·10990
Mendara	0·12170	0·10970	0·10560	0·06076	0·10780	0·08024	0·12670	0·14940

TABLE 10. AVERAGE NUMBER OF BULLOCK HOURS PER ACRE OF JOWAR FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	BULLOCK LABOUR IN HOURS							MONEY VALUE IN RUPEES.				
	No. of fields	Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money value
(1)	(2)	(3)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Holding Sample												
Akola	17	30·57	6·22	10·34	8·76	..	55·89	2·34	53·55	21·20	1·23	19·98
Murtizapur	16	13·86	5·28	10·27	12·52	..	41·93	1·66	40·27	14·62	0·62	14·00
Akot	14	19·76	5·70	11·34	6·63	..	43·43	14·43	29·00	15·70	5·62	10·08
Balapur	13	13·75	4·37	8·38	4·69	..	31·18	3·43	27·76	9·39	1·28	8·11
Basim	29	21·56	6·52	9·96	8·22	..	46·26	0·37	45·89	15·96	0·13	15·83
Man rulpir	23	26·04	6·85	12·68	14·93	..	60·50	6·60	53·90	24·02	3·42	20·59
District	112	21·62	6·01	10·62	9·69	..	47·92 S.E. 2·24 i.e. 4·67%	4·25	43·68	17·42 Cols 12 and 13 as % of Col. 11.	1·86	15·56
Cols. 3 to 7 and 9 and 1 as % of Col. 8		45·12	12·54	22·16	20·22			8·87	91·15		10·68	89·32
Field Sample												
Akola	8	34·27	5·63	11·74	8·99	..	60·62	2·47	58·16	21·08	0·86	20·22
Murtizapur	10	19·20	6·44	11·10	9·24	..	45·98	1·88	44·10	16·08	0·74	15·33
Akot	10	13·45	4·63	7·12	5·00		30·20	8·58	21·62	10·11	2·73	7·38
Balapur	10	14·29	4·00	8·02	5·71	..	32·02	2·20	29·82	11·52	1·17	10·35
Basim	10	16·10	5·94	10·43	9·04	..	41·50	..	41·50	14·38	..	14·38
Mangrulpir	10	25·90	5·37	11·14	13·28	..	55·69	7·42	48·27	19·37	2·59	16·78
District	58	20·06	5·32	9·86	8·52	..	43·77 S.E. 2·40 i.e. 5·48%	3·80	39·97	15·23 Cols. 12 and 13 as % of Col. 11.	1·36	13·86
Cols. 3 to 7 and 9 and 10 as % of Col. 8		45·83	12·15	22·53	19·46			8·68	91·32		8·93	91·00

TABLE 21.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL BULLOCK HOURS PER ACRE OF JOWAR.

Holding sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	1859.64
Villages	22	565.06
Holdings	25	460.59
Fields	59	547.83

Field sample

Due to	Degrees of freedom.	Mean square.
Tehsils	5	1403.24
Villages	23	272.90
Fields	29	335.49

TABLE 22.—COSTS OTHER THAN LABOUR INCLUDING MATERIALS IN RUPEES PER ACRE OF JOWAR

Tehsil	No. of fields	SEED		Manure	Watch	Taxes	No. of fields averaged	Actual lease rent	Lease rent distributed over the entire sample	Implements
		Quantity in lbs.	Money value							
1	2	3	4	5	6	7	8	9	10	11
Holding Sample										
Akola	17	3.65	0.78	5.40	0.85	2.39	1	15.43	0.91	0.82
Murtizapur	16	2.93	0.47	0.16	0.40	1.63	4	15.54	3.89	0.64
Akot	14	6.77	1.34	1.70	0.37	3.76	7	18.82	9.40	0.48
Balapur	13	4.38	0.72	1.07	0.10	2.78	4	31.15	9.58	0.42
Basim	29	3.10	0.39	0.57	0.27	0.93	10	29.34	10.12	0.81
Mangrulpir	23	3.64	0.44	0.81	0.44	1.30	5	52.43	17.35	0.74
District	112	3.85	0.63	1.49	0.40	1.90	31	28.69	9.16	0.67
Field Sample										
Akola	8	4.40	0.88	3.93	0.22					
Murtizapur	10	3.54	0.59	..	..					
Akot	10	5.47	0.89	0.83	0.87					
Balapur	10	3.26	0.50	0.51	0.49		Not recorded.			
Basim	10	3.10	0.41	..	0.74					
Mangrulpir	10	2.68	0.33	7.55	1.18					
District	58	3.90	0.59	2.07	0.60					

TABLE 23.—AVERAGE OUTTURN PER ACRE OF JOWAR (GRAIN IN LBS.)

Tehsil.	*Holding sample*		*Field sample*	
	Produce reported by farmer.	Estimated produce from crop cutting experiments.	Estimated produce from crop cutting experiments.	Average from the combined sample by crop cutting experiments.
Akola	297.25 (17)*	248.00 (8)	356.45 (7)	298.61 (15)
Murtizapur	542.72 (16)	897.16 (9)	546.86 (10)	712.79 (19)
Akot	405.57 (7)	213.50 (8)	183.90 (8)	198.70 (16)
Balapur	164.79 (12)	172.13 (6)	202.90 (8)	189.71 (14)
Basim	487.98 (23)	477.36 (10)	404.24 (10)	440.80 (20)
Mangrulpir	447.29 (23)	651.20 (9)	711.60 (10)	682.98 (19)
District	408.81 (98)	468.67 (50)	419.18 (53)	443.20 (103)

*Figures in brackets refer to number of fields on which per acre value is based.

TABLE 24.—TOTAL EXPENDITURE AND ITS DISTRIBUTION IN RUPEES PER ACRE OF JOWAR.

Tehsil	No. of fields	Man labour	Woman labour	Bullock labour	Seed	Manure	Taxes	Lease rent	Watch	Implements	Total
1	2	3	4	5	6	7	8	9	10	11	12
Holding Sample											
Akola ..	17	16·90	3·99	19·84	0·78	5·40	2·38	0·91	0·85	0·82	51·88
Murtizapur ..	16	12·40	4·60	14·62	0·47	0·16	1·63	3·89	0·40	0·64	38·81
Akot	14	16·92	7·40	15·70	1·34	1·70	3·76	9·40	0·37	0·48	57·07
Ba'apur ..	13	11·82	4·81	9·39	0·72	1 07	2·78	9·58	0·10	0·42	40·69
Basim	29	13·64	4·66	15·96	0·39	0·57	0·92	10·12	0·27	0·81	47·35
Mangrulpir ..	23	16·31	5·35	21·99	0·44	0·81	1·30	17·35	0·44	0·74	64·74
District ..	112	14·70	5·05	16·80	0·63	1·49	1·90	9·16	0·40	0·67	50·80
Field Sample											
Akola ..	8	17·28	5·32	21·08	0·88	3·93			0·22		48·70
Murtizapur ..	10	13·98	6·01	16·08	0·59	..	Not	recorded	..	Not	36·65
Akot	10	13·38	5·35	10·11	0·89	0·83			0·87	recorded	31·44
Balapur ..	10	10·73	3·69	11·52	0·50	0·51			0·49		27·44
Basim	10	11·73	4·56	14·38	0·41	..			0·74		31·81
Mangrulpir ..	10	16·48	7·32	19·37	0·33	7·55			1·18		52·23
District ..	58	13·82	5·38	15·23	0·59	2·07			0·60		37·69
											+ 1·90 Taxes
											+ 9·16 Rent
											+ 0·67 Implements.
											49·42

TABLE 25.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF MONEY VALUE PER ACRE OF JOWAR.

Holding sample

Due to	Degrees of freedom	Total money value	Components common to holding and field sample	Components estimated in holding sample only.
			Mean square	
Tehsils	5	1784.04	1028.57	579.56
Villages	22	975.90	237.91	680.20
Holdings	25	1854.83	342.20	1442.23
Fields	59	274.21	242.53	92.50

Field sample

Due to	Degrees of freedom	Mean square
Tehsils	5	978.01
Villages	23	247.66
Fields	29	129.35

TABLE 26.—AVERAGE NUMBER OF MAN-HOURS PER ACRE OF GROUNDNUT FOR DIFFERENT CATEGORIES OF OPERATIONS TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	MAN LABOUR IN HOURS									MONEY VALUE IN RUPEES		
	No. of fields	Pre-sowing	Sowing	Post sowing	Har-vesting	Miscel-laneous	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13
Akola	7	24·70	7·44	24·02	11·30	0·23	66·70	51·84	15·85	8·76	6·76	2·00
Murtizapur	17	48·28	7·64	29·93	20·23	0·64	106·72	51·11	55·61	14·25	7·82	6·42
Akot	4	34·72	9·46	19·58	8·32		72·07	61·32	10·75	10·57	8·96	1·62
Balapur	8	34·11	10·61	20·85	16·18	1·70	83·45	52·98	30·47	12·34	7·85	4·49
Basim	14	44·52	8·03	22·80	27·86	1·35	104·57	49·20	55·37	11·47	5·44	6·03
Mangrulpir	14	54·98	9·21	29·84	12·47	2·37	108·86	78·83	30·03	14·00	8·76	5·24
District	64	43·72	8·53	25·92	17·98	1·22	97·38 S.E. 6·66 i.e. 6·84%	57·71	39·67	12·52	7·46	5·05
Columns 3 to 7 and 9 and 10 as % of column 8		44·90	8·76	26·62	18·46	1·25		59·26	40·74	Cols. 12 & 13 as % of column 11.	59·58	40·34

TABLE 27.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL MAN HOURS PER ACRE OF GROUND-NUT.

Due to	Degrees of freedom.	Mean square.
Tehsils	5	2757.11
Villages	15	2843.60
Fields	43	1606.65

TABLE 28.—AVERAGE NUMBER OF WOMAN HOURS PER ACRE OF GROUNDNUT FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	No. of fields	WOMAN LABOUR IN HOURS.								MONEY VALUE IN RUPEES.		
		Pre-sowing	Sowing	Post Sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equi-valent.
1	2	3	4	5	6	7	8	9	10	11	12	13
Akola	7	11·90	6·63	28·35	26·39		73·28	71·21	2·07	5·37	5·14	0·24
Murtizapur	17	19·63	8·01	30·33	21·34		79·31	59·70	19·60	7·74	6·21	1·52
Akot	4	76·20	0·82	70·61	69·37		217·00	207·74	9·25	11·90	11·52	0·38
Balapur	8	27·31	8·15	29·91	20·79		85·15	79·81	5·34	5·50	5·22	0·28
Basim	14	40·15	5·77	41·80	37·25	1·84	126·80	97·78	29·02	7·99	6·46	1·53
Mangrulpir	14	28·75	8·06	51·30	57·50		145·61	128·76	16·85	9·81	8·50	1·31
District	64	29·76	6·95	39·55	36·21	0·40	112·88	96·16	16·71	7·97	6·86	1·11
Cols. 3 to 7 & 9 and 10 as % of Col. 8		26·36	6·16	35·04	32·08	0· 35	S.E. 8·61 i.e. 7·63%	85·19	14·80	Cols. 12 and 13 as % of Col.11	86·07	13·93

TABLE 29.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL WOMAN HOURS PER ACRE OF GROUND-NUT.

Due to	Degrees of freedom.	Mean square.
Tehsils	5	19472.52
Villages	15	4743.71
Fields	43	4142.96

TABLE 30.—WAGE RATES IN RUPEES PER HOUR FOR GROUNDNUT.

Tehsil and village	PRE-SOWING		SOWING		POST SOWING		HARVESTING	
	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour
Akola								
Masa	0·13070	0·07940	0·11480	0·12060	0·09660	0·06776	0·11730	0·06427
Redhwa	0·10810	0·10000	0·17430	0·12500	0·19660	0·08333	0·14280	0·15870
Vairatrajapur	0·16125	0·06250	0·16670	0·09028	0·16670	0·05952	0·16670	0·04167
Bhendikaji		Omittcd						
Kaulkhed		No groundnut						
Murtizapur								
Lodhipur	0·09189	0·08013	0·12500	0·09028	0·11250	0·09911	0·16140	0·13400
Sultanpur		No groundnut						
Karli	0·09825	0·08398	0·14630	0·08250	0·12030	0·07310	0·15610	0·11920
Mohogawan	0·10390	0·08844	0·07237	0·06629	0·11250	0·06956	0·19620	0·08010
Mohokhed	0·16100	0·06948	0·14860	0·14250	0·15600	0·14500	0·25190	0·15100
Akot								
Lothkhed		No groundnut						
Sawargaon	0·12710	0·12970	0·10360	0·05208	0·08523	0·02524	0·13770	0·03871
Mahamadabad	0·15160	0·07188	0·19270	0·07564	0·14330	0·05492	0·12100	0·03588
Jainpurpimpri		No groundnut						
Marodi								
Balapur								
Pattiamrai	0·16000	0·05299	0·19900	0·08850	0·10360	0·06695	0·12020	0·09189
Khandala		No groundnut						
Manki	0·11650	0·06250	0·16000	..	0·09906	0·05398	0·17530	0·09797
Nagod		No groundnut						
Tulanga	0·16700	0·05924	0·16670	..	0·14280	0·04167	0·25000	..
Basim								
Chiwara	0·08333	0·08913	0·25000	0·08333	0·13780	0·04167	0·03201	0·07003
Kajalamba	0·10390	0·05275	0·10360	0·07060	0·08523	0·04261	0·13770	0·08694
Tapowan Kd.		No groundnut						
Kurha	0·10500	0·04700	0·08282	0·03750	0·10260	0·07193	0·14470	0·10770
Krishna	0·06220	0·04729	0·12500	0·05655	0·16250	0·06124	0·10460	0·06795
Mangrulpir								
Baldeo	0·11560	0·06618	0·12070	0·09149	0·13060	0·07264	0·10970	0·06324
Pardi	0·10420	0·03304	0·15100	..	0·10030	0·04400	0·06250	0·11610
Pimpri Kd.	0·10090	0·04084	0·16670	0·08854	0·14500	0·05994	0·19740	0·15150
Chondhi	0·09754	0·04281	0·10800	0·06296	0·09915	0·07646	0·14030	0·06794
Mendara	0·10760	0·06635	0·10360	0·08000	0·10350	0·07019	0·07812	0·10590

TABLE 29.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL WOMAN HOURS PER ACRE OF GROUND-NUT.

Due to	Degrees of freedom.	Mean square.
Tehsils	5	19472.52
Villages	15	4743.71
Fields	43	4142.96

TABLE 30.—WAGE RATES IN RUPEES PER HOUR FOR GROUNDNUT.

Tehsil and village	PRE-SOWING		SOWING		POST SOWING		HARVESTING	
	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour	Man labour	Woman labour
Akola								
Masa	0·13070	0·07940	0·11480	0·12060	0·09660	0·06776	0·11730	0·06427
Redhwa	0·10810	0·10000	0·17430	0·12500	0·19660	0·08333	0·14280	0·15870
Vairatrajapur	0·16125	0·06250	0·16670	0·09028	0·16670	0·05952	0·16670	0·04167
Bhendikaji		Omitted						
Kaulkhed		No groundnut						
Murtizapur								
Lodhipur	0·09189	0·08013	0·12500	0·09028	0·11250	0·09911	0·16140	0·13400
Sultanpur		No groundnut						
Karli	0·09825	0·08398	0·14630	0·08250	0·12030	0·07310	0·15610	0·11920
Mohogawan	0·10390	0·08844	0·07237	0·06629	0·11250	0·06956	0·19620	0·08010
Mohokhed	0·16100	0·06948	0·14860	0·14250	0·15600	0·14500	0·25190	0·15100
Akot								
Lothkhed		No groundnut						
Sawargaon	0·12710	0·12970	0·10360	0·05208	0·08523	0·02524	0·13770	0·03871
Mahamadabad	0·15160	0·07188	0·19270	0·07564	0·14330	0·05492	0·12100	0·03588
Jainpurpimpri		No groundnut						
Marodi								
Balapur								
Pattiamrai	0·16000	0·05299	0·19900	0·08850	0·10360	0·06695	0·12020	0·09189
Khandala		No groundnut						
Manki	0·11650	0·06250	0·16000	..	0·09906	0·05398	0·17530	0·09797
Nagod		No groundnut						
Tulanga	0·16700	0·05924	0·16670	..	0·14280	0·04167	0·25000	..
Basim								
Chiwara	0·08333	0·08913	0·25000	0·08333	0·13780	0·04167	0·03201	0·07003
Kajalamba	0·10390	0·05275	0·10360	0·07060	0·08523	0·04261	0·13770	0·08694
Tapowan Kd.		No groundnut						
Kurha	0·10500	0·04700	0·08282	0·03750	0·10260	0·07193	0·14470	0·10770
Krishna	0·06220	0·04729	0·12500	0·05655	0·16250	0·06124	0·10460	0·06795
Mangrulpir								
Baldeo	0·11560	0·06618	0·12070	0·09149	0·13060	0·07264	0·10970	0·06324
Pardi	0·10420	0·03304	0·15100	..	0·10030	0·04400	0·06250	0·11610
Pimpri Kd.	0·10090	0·04084	0·16670	0·08854	0·14500	0·05994	0·19740	0·15150
Chondhi	0·09754	0·04281	0·10800	0·06296	0·09915	0·07646	0·14030	0·06794
Mendara	0·10760	0·06635	0·10360	0·08000	0·10350	0·07019	0·07812	0·10590

TABLE 31.—AVERAGE NUMBER OF BULLOCK HOURS PER ACRE OF GROUNDNUT FOR DIFFERENT CATEGORIES OF OPERATIONS, TOTAL AND THEIR MONEY EQUIVALENT.

Tehsil	No. of fields	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Miscel-laneous	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13
Akola	7	19·60	7·23	11·60	0·37	..	38·82	1·80	37·02	13·64	0·77	12·87
Murtizapur	17	34·57	6·08	10·78	1·87	..	53·30	..	53·30	18·30	..	18·30
Akot	4	17·84	5·54	8·16	4·52	..	36·06	1·25	34·81	12·75	0·64	12·11
Balapur	8	19·41	5·33	6·89	1·34	..	32·97	11·07	21·90	11·92	4·30	7·62
Basim	14	27·60	6·07	9·95	0·70	..	44·32	4·47	39·85	15·41	1·58	13·83
Mangrulpir	14	38·35	8·32	13·74	0·84	..	61·25	2·55	58·70	21·60	1·20	20·40
District	64	29·30	6·57	10·69	1·32	..	47·87	3·20	44·68	16·74	1·27	15·46
Columns 3 to 7 & 9 & 10 as % of col. 8. ..	..	61·21	13·72	22·33	2·76		S.E. 3·66 i.e. 7·64%	6·68	93·33	Cols. 12 &13 as% column of 11	7·59	92·35

TABLE 32.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL BULLOCK HOURS PER ACRE OF GROUND-NUT.

Due to	Degrees of freedom	Mean square
Tehsils	5	1217.77
Villages	15	858.80
Fields	43	301.16

TABLE. 33.—COSTS OTHER THAN LABOUR INCLUDING MATERIALS IN RUPEES PER ACRE OF GROUNDNUT.

Tehsil	No. of fields	*For Combined Sample*				*Holding Sample*					
		SEED		Manure	Watch	No. of fields averaged	Taxes	No. of fields averaged	Actual lease rent	Lease rent distributed over the entire sample of fields.	Implements
		Quantity in lbs.	Money value								
1	2	3	4	5	6		8	9	10	11	12
Akola	7	55·02	18·79	..	0·37	3	1·87	1	15·43	5·14	..
Murtizapur ..	17	39·88	11·98	1·37	0·24	10	1·35	3	19·81	5·94	..
Akot	4	39·39	11·73	..	0·38	1	5·73	1	14·38	14·38	..
Balapur	8	51·14	13·15	2·15	0·81	2	2·56	2	30·60	30·60	..
Basim	14	38·01	11·37	0·45	2·25	6	0·48	1	35·25	5·88	..
Mangrulpir ..	14	42·51	11·78	6·38	2·60	8	0·68	4	77·76	38·88	..
District	64	42·95	12·68	2·13*	1·29	30	1·28	12	41·39	16·56	0·64

TABLE 34.—AVERAGE OUT-TURN PER ACRE OF GROUND-NUT IN LBS.

Tehsil	Produce reported by farmer	Estimated produce (Dry pods) from crop cutting experiments
1	2	3
Akola	56.85 (3)*	17.40 (4)
Murtizapur	147.48 (9)	272.08 (10)
Akot	54.00 (1)	127.36 (5)
Balapur	72.00 (1)	164.53 (3)
Basim	387.05 (12)	474.40 (11)
Mangrulpir	566.02 (16)	424.46 (7)
District	364.88 (42)	302.76 (40)

*Figures in brackets refer to number of fields on which per acre value is based.

TABLE 35.—TOTAL EXPENDITURE AND ITS DISTRIBUTION IN RUPEES PER ACRE OF GROUNDNUT.

Tehsil	No. of fields	Man labour	Woman labour	Bullock labour	Seed	Manure	Watch	Total
1	2	3	4	5	6	7	8	9
Akola	7	8·76	5·37	13·64	21·44	..	0·37	49·59
Murtizapur	17	14·25	8·06	18·30	14·74	1·37	0·24	56·95
Akot	4	10·57	11·90	12·75	11·73	..	0·38	47·32
Balapur	8	12·37	5·50	11·92	13·15	2·15	0·81	45·85
Basim	14	11·47	7·99	15·41	11·37	0·45	2·25	48·94
Mangrulpir	14	14·01	9·81	21·60	11·78	6·38	2·60	66·17
District	64	12·52	8·05	16·74	13·70	2·13	1·29	54·43
								+ 1·28 Taxes
								+ 16·56 Lease
								+ 0·64 Implements
								72·91

TABLE 36.—POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL MONEY VALUE PER ACRE OF GROUND-NUT

Due to	Degrees of freedom	Mean square
Tehsils	5	683.03
Villages	15	502.25
Fields	43	328.05

POOLED ANALYSIS OF VARIANCE FOR DISTRICT OF TOTAL MONEY VALUE OF COMPONETS IN HOLDING SAMPLE.

Due to	Degrees of freedom	Mean square
Tehsils	5	1566.36
Villages	9	2036.24
Holdings	9	1791.14
Fields	5	250.93

TABLE 37.—LABOUR REQUIREMENTS PER ACRE FOR THE THREE CROPS.

Crop	Sample	No. of fields	Pre-sowing	Sowing	Post-sowing	Harvest-ing	Misc.	Total
1	2	3	4	5	6	7	8	9
Man Labour (in hours)								
Cotton	Holding	131	40.34	8.43	29.08	3.21	1.51	82.57±4.64
	Field	55	46.04	8.84	25.58	3.83	3.11	87.39±7.57
Jowar	Holding	112	35.84	9.01	22.06	40.60	0.28	107.79±4.85
	Field	58	35.79	8.40	22.04	33.85	0.36	98.45±5.73
Ground-nut	..	64	43.72	8.53	25.92	17.98	1.22	97.38±6.66
Woman Labour (in hours)								
Cotton	Holding	131	21.90	3.87	49.13	47.10	1.98	123.99±7.88
	Field	55	26.54	3.16	61.70	46.61	0.11	138.57±8.74
Jowar	Holding	112	19.33	1.44	27.22	17.61	..	65.61±4.69
	Field	58	27.12	1.25	25.77	15.51	..	69.66±7.40
Ground-nut	..	64	29.76	6.95	39.55	36.21	0.40	112.88±8.61
Bullock Labour (in hours)								
Cotton	Holding	131	26.53	5.74	12.91	0.14	..	45.32±3.59
	Field	55	30.99	5.78	10.98	0.06	0.78	49.36±5.25
Jowar	Holding	112	21.62	6.01	10.62	9.69	..	47.92±2.24
	Field	58	20.06	5.32	9.86	8.52	..	43.77±2.40
Ground-nut	..	64	29.30	6.57	10.69	1.32	..	47.87±3.66

TABLE 38.—MONEY EQUIVALENTS OF DIFFERENT ITEMS OF COST PER ACRE FOR THE THREE CROPS.

Sample	No. of fields	Man labour	Woman labour	Bullock labour	Seed	Manure	Taxes	Lease rent	Watch	Imple-ments	Total
2	3	4	5	6	7	8	9	10	11	12	13
Holding	131	10·50	9·42	15·88	1·65	6·68	2·15	4·77	..	0·64	51·69
Field	55	10·57	10.51	17·39	1·79	3·75	2·15	4·77	..	0·64	51·57
Holding	112	14·70	5·05	16·80	0·63	1·49	1·90	9·16	0·40	0·67	50·80
Field	58	13·82	5·38	15·23	0·59	2·07	1·90	9·16	0·60	0·67	49·42
	64	12·52	8·05	16·74	13·70	2·13	1·28	16·56	1·29	0·64	72·91

APPENDIX I.—PILOT SURVEY IN AKOLA DISTRICT, MADHYA PRADESH 1952-53.

Form 1 (A).—*List of cultivators' holdings*

Tehsil _____ **Village** _____ **Name of Agricultural Kamgar** _____

Serial No. of holding	Name /s of cultivator /s	Resident or Non-resident	Survey / Sub-No.	Area according to title of operation			Area according to crops as in 1951-52				REMARKS
				Owned	Cash-rented	Crop-shared	Jowar	Cotton	Ground-nut	Other crops.	

FORM 1 (B.)—*Village Schedule*

Tehsil_____ Name of Village- _____ Name of Investigator_____

A. Classification of Area (in acres) 1952-53.

Total geo-raphical area of the village	Forest	Barren uncultiv-able land	Land put to non-agricultural uses.	Culturable Waste	Permanent pastures and other grazing lands	Misc. tree crops & groves not included in net area sown	Current fallows	Other fallow land	Net area sown	Total cropped area	Area sown more than once
1	2	3	4	5	6	7	8	9	10	11	12

B. Area and yield of principal crops in 1951-52 *and* 1952-53.

Crops	Area during the previous crop year 1951-52			Area during the current crop 1952-53			Average condition factor for the village over last five years		Condition factor during the year 1952-53 (In annas)
	Irrigated	Un / irrigated	Total	Irrigated	Un-irrigated	Total	In annas	in lb acre	
1	2	3	4	5	6	7	8	9	10
Cotton									
Jowar									
Groundnut									
Wheat									
(Other crops, if any, with substantial acreage).									

(Cont.)

C. Human population (according to 1951 census)

1. Total number of inhabitants.

(i) Adult males. **(ii) Adult females.** **(iii) Children.**

2. Distribution according to occupation.

(a) Number of persons living on agriculture.

Description	Number of holders	Number of persons wholly dependent		
		Adult males	Adult females	Children
1	2	3	4	5
(i) Non-cultivating owners.				
(ii) Cultivating owners.				
(iii) Tenant cultivators.				
(iv) Farm labourers				
(v) Cultivating owner-cum-tenants ..				
(vi) Cultivator-cum-labourers				

(b) Number of persons living mainly on non-agricultural occupations.

Name of occupation	Number	Number of dependents		Children
		Adult males	Adult females	
1	2	3	4	5
Carpenters				
Black Smiths				
Masons				
Potters				
Other				

D. Cattle population (according to the 1951-52 cattle census).

1. Breeding animals :— (i) Bulls. (ii) Buffaloes.
2. Draught animals :— (i) Bullocks. (ii) Buffaloes.
3. Milch cattle.

	In milk	Dry	Total
Cows			
Buffaloes			

4. Calves and heifers.
5. Sheep.
6. Goats.
7. Other animals.

E. General conditions of cultivation in the village.

1. What are the general types of soils on which the principal crops are grown ?

2. Time of growing for different crops-effecting early or late sowing.

2-1. What are the rotations usually followed ? (Give names of various rotations.)

3. Are seeds usually prepared in the village or procured from outside ?

4. What are the general seed rates for principal crops ?

Cotton

Jowar

Groundnut

Wheat

Other important crops (if any)

5. Is manuring a common feature ? What are the types of manures used and quantities applied per acre for the principal crops ?

A. Methods of cultivation-Local practices regarding methods of cultivation sowing, harvesting etc.,

6. Give the facilities of marketing, distance of nearest market and method of transportation, cost of marketing.

7. Is the crop disposed off through brokers, commission agents, merchants or cooperative societies ?

Seasonal prices of main and competing crops-difference between local price and farm price if any.

8. What are the general conditions regarding availability of agricultural labour ? Is there a dearth of labour during

ploughing,

sowing,

weeding,

harvesting and threshing

operations ?

System of engaging agricultural labour -daily, weekly seasonally annualy-methods of wage payment-wage rates in kind and cash for main types of work and in different seasons.

PILOT SURVEY IN AKOLA DISTRICT, MADHYA PRADESH, 1952-53.

Form 2 (A). *Particulars of selected holdings.*

1. **Area held and classification of the same by title of operation and by crops.**

Name /s of cultivator /s	Survey / Sub-No.	Area according to title of operation			Area according to crops as intended				Remarks
		Owned	Cash rented	Crop shared	Jowar	Cotton	Ground-nut	Other crops	

N. B. Size of holding, area by title of operation and intended acreage under crops relate to 1952-53 and has to be found by conducting enquiry of cultivators concerned.

2. **Stock position of livestock :—**

Classification of animals		No. raised on farm	No. Purchased	Purchase value and time of purchase	Current value	Remarks
Bulls	Breeding					
	Draught					
	others					
Cows	in milk					
	dry					
Calves and heifers	Breeding					
Buffaloes	draught					
	others					
She-buffaloes	in milk					
	dry					
Sheep						
Goats						
Polutry						
Others						

3. **Stock position of livestock feed etc. :—**

Name of item	As on 1-5-52		As on 1-5-53	
	Quantity	Value	Quantity	Value
(1) Fodder (e. g. jowar stalks, bhusa grass, etc.)				
(2) Concentrates (Oilcakes, cotton seed, etc.)				
(3) Other feeds (grain etc).				
(4) Farmyard manure.				

PILOT SURVEY ON COST OF PRODUCTION OF CROPS AKOLA DISTRICT MADHYA PRADESH 1952-53.

Form 2 (B) *Holding Questionnaire*

Tehsil

Village

Name of Investigator

Date of Visit

A. Details about the Cultivator and his Family.

(a) Name in full of the cultivator
Main Occupation
Subsidiary Occupation
Caste Age

(b) Family members

(c) Permanent farm servants

Serial No.	Name	Sex	Age	Relation ship to the head of the family	Married or un-Married	Earning or dependent	Occupation if any		Employed during the year in days				Remarks
							Main	Subsidiary	On own farms	On others farms	On non-Agricultural work	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14

(B) *Details of the Holding*

(a) ***Extent of the Holding***

1. *Cultivated Area*	Owned	Rented with terms of lease	Free of Rent	Other areas in cultivation	Total
(i) Irrigated					
(ii) Un-irrigated					
(iii) Total					
2. Un-cultivated area included in holding					
3. Grazing fields, orchards,					
4. Waste lands and Garden					
5. Dairy Farm					
6. Quarters etc. (home sheds) cattle shed, working floor					

(b) ***Details of Cultivated Area*** No. of separate fragments

Serial No.	Khasra No.	Area	No. of bunded fields	Owner-ship	Land Revenue	Cess	Irriga-tion charges	Sources of irri-gation	Area irrigated by each	Crop /crops grown		Yield Main crop	By pro-duct	Rent due to others if any	
										Last year	Current year			Cash	Kind (Value)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

C. Inventory of property and Implements.

(a) Property

Description	Number	Year of construction	Present estimated value	Total expected life in years	Repairs in 1952-53
1. Dwelling houses					
2. Storage sheds					
3. Livestock sheds					
4. Irrigation wells					
5. Others					

(b) Implements

Description	Number	Year of construction or purchase	Present estimated value	Total expected life in years	Repairs in 1952-53
1	2	3	4	5	6
1. Carts					
2. Ploughs					
3. Harrows					
4. Seed drills					
5. Water lifts					
6. Sickles					
7. Crowbars					
8. Shovels					
9. Weeders					
10. Spades					
11. Axes					
12. Baskets					
13.					
14.					
15.					

PILOT SURVEY, AKOLA DISTRICT, MADHYA PRADESH 1952-53.

FORM 3 (A & B)-*Record of daily agricultural Operations.*

Tehsil_____ Village_____ Name of cultivator /s_____

Name of Kamdar_____ Month and year_____

Date	Survey / Sub-No.	Name of Crop	Type of agricultural Operation	Kind and Quantity of materials used if any	HOURS OF LABOUR EMPLOYED FOR PAYMENTS MADE												REMARKS
					Human labour						Animal labour			Total			
					Supervisory			Manual									
					Own	Hired	Payment	Own	Hired	Payment	Own	Hired	Payment	human labour	bullock labour	Total payment	

PILOT SURVEY IN DISTRICT, PRADESH 1952-53.

Form 4 *Fortnightly account of cattle maintenance etc.*

Tehsil .....Village.....Name of cultivator.....

Name of Agri. Kamdar.....$\frac{\text{1st}}{\text{2nd}}$ half of month.....

1. Change in the size of livestock during the fortnight

Classification of animals	Addition			Reduction				Remarks
	No. born	No. added by transfer	No. purchased	No. died	No. reduced by transfer	No. sold	Price	
Total								

2. Expenditure on Livestock maintenance :

Name of item	Addition to stocks, Consumption & costs					Remarks
	Home-grown	Purchased		Quantity Consumed by Livestock	Cost	
		Quantity	Cost			
a)						
i) Dry fodder						
ii) Green fodder						
iii) Concentrates						
iv) Miscellaneous (salt, gur, oil, etc.)						
b) Service charges (e. g. Veterinary)						
c) Any other items (e. g. grazing charges)						
Total						

Item 3. Income from livestock products and services.

Quantity sold or disposed of and payments received.

	Quantity	Cost	Remarks
a)			
i) Dry fodder			
ii) Green fodder			
iii) Concentrates			
b)			
i) Farmyard manure			
ii) Milk etc.			
iii) Services rendered			
iv) Any other items			

PILOT SURVEY FOR ESTIMATING THE COST OF PRODUCTION OF CROPS IN AKOLA DISTRICT, MADHYA PRADESH, 1952-53.

FORM 5 (A) *Crop-cutting Experiments.*

Particulars of Selected Fields.

Category of experiments :— (*a*) For Selected Holdings.
(*b*) For selected survey/sub-numbers.

(*Note* :—Cancel the Category which is not applicable.)

Tehsil. _____ Village. _____ Name of Kamdar. _____

	COTTON		JOWAR		GROUNDNUT	
1. Name of Crop.						
2. (*a*) For Category (*a*) Survey/sub-division numbers growing the crop in the selected holding.	Holding I	Holding II	Holding I	Holding I	Holding II	Holding II
(*b*) Survey/sub-number selected						
(*c*) Number of fields in the selected survey/sub-number						
(*d*) Name of the cultivator.						
3. Soil						
(*a*) Type (Sandy, loam or clay as per settlement classification.)						
(*b*) Level.						
4. Name of the last crop or crops grown in the field and the month and year in which it was harvested.						
5. (*a*) Irrigated or unirrigated.						
(*b*) Source of irrigation if any.						
6. Manuring—kind and quantity.						
(*a*) Previous season's crop						
(*b*) This season's crop.						
7. Variety of crop and source of seed.						
8. (*a*) Names of other crops sown mixed if any, with the experimental crop in the selected field.						
(*b*) Proportions of each crop in the mixture.						
(*i*) as per seed-rate.						
(*ii*) as per estimate of stand.						
(*iii*) as per entries in the Khasra register.						

	COTTON	JOWAR	GROUNDNUT
9. (*a*) Length of the field in feet. (for cotton, length should be across the rows.)			
(*b*) Breadth of the field in feet. (For cotton, breadth should be in terms of number of rows.)			
(*c*) (*i*) *For cotton only.* Length in feet—132.			
(*ii*) *For Jowar and Groundnut only.* Length in feet—33.			
(*d*) (*i*) *For cotton only.* Number of cotton rows—22.			
(*ii*) *For Jowar and Groundnut only.* Breadth in feet—17.			
10. (*a*) Column of random numbers consulted for locating the plot.			
one digit.			
two digit.			
three digit			
(*b*) Pairs of random numbers used for locating plot.			
11. *For Cotton only.*			
(*a*) Dimensions of the plot in feet and inches.			
Length 1			
2			
Breadth 1			
2			
(*b*) (*i*) Number of cotton rows in the plot.			
(*ii*) number of tur rows in the plot.			
(*iii*) number of other crop rows in the plot.			
(*c*) Any other crops occur in the same row as Cotton ?			
12. *REMARKS.*			
(*a*) Stand.			
(*b*) Germination.			
(*c*) Damages by pests and diseases nature of extent of damage (Severe, Light or nil.)			
(*d*) Any particular factor that affects the plant in the selected field in a different way from that of other surrounding fields.			

Date of despatch :———————

Signature of the Kamdar———————

Prepare two copies of this form and send one to the Statistical Adviser, Indian Council of Agricultural Research, Jamnagar House Hutments, Mansingh Road, New Delhi.

PILOT SURVEY FOR ESTIMATING THE COST OF PRODUCTION OF CROPS IN AKOLA DISTRICT, MADHYA PRADESH, 1952-53.

Form 5 (B).—*Crop-cutting Experiments.*

Results of harvesting *Cotton*

Category of Experiments. (a) For selected holdings. / (b) For selected Survey/Sub-numbers.

Note : Cancel the Category (a) or (b) which is not applicable

Tahsil. _____ Village. _____ Name of Kamdar. _____

Survey / Sub-number	Number pickings	Date of picking	Weight of kapas in		Labour employed			Time taken in picking etc.	Remarks
			Srs.	Chhs.	Men	Women	Children		
1	2	3	4		5	6	7	8	9

Date of despatch

Signature of Kamdar.

Note :— (i) Weight should be recorded to the nearest half chhatak.

(ii) Prepare two copies of this orm and send one to the Statistical Adviser, Indian Council of Agricultural Research, Jamnagar House, Mansingh Road, New Delhi.

PILOT SURVEY FOR ESTIMATING THE COST OF PRODUCTION OF CROPS IN AKOLA DISTRICT, MADHYA PRADESH, 1952-53.

Form 5 (B).—*Crop-cutting Experiments.*

Results of Harvesting *Jowar*.

Tahsil. Village. Name of Kamdar.

Survey/Sub-division number.

1.	Date of harvesting.					
2.	Weight of cobs on the date of harvesting.	Srs.	Chh.		Srs.	Chh.
3.	Date of second weighment.					
4.	(a) Weight of cobs on the day of second weighment	Srs.	Chh.		Srs.	Chh.
	(b) Weight of grain after the cobs are threshed and winnowed.					
5.	Date of third (final) weighment.					
6.	Weight of dried jowar grain at final weighment.					
7.	Labour employed on the date of harvesting.	Men	Women	Children.	Men	Women Children.
8.	Time taken for					
	(a) harvesting cobs etc.					
	(b) for threshing, winnowing an ! weighing the grain.					
9.	Remarks.					

Date of despatch. Signature of Kamdar.

Note:—1. Weight should be recorded to the nearest half chhatak.

2. Prepare two copies of this form and send one to the Statistical Adviser, Indian Council of Agricultural Research, Jamnagar House, Mansingh Road, New Delhi.

PILOT SURVEY FOR ESTIMATING THE COST OF PRODUCTION OF CROPS IN AKOLA DISTRICT, MADHYA PRADESH, 1952-53

Form 5 (B)—*Crop-cutting Experiments.*

Results of harvesting *Groundnut.*

Category of Experiment : (a) For selected holdings. / (b) For selected Survey/Sub-numbers.

(*Note* :—Cancel the category which is not applicable.)

Tahsil. Village. Name of Kamdar.

Survey/Sub-division number.				
1. Date of harvesting.				
2. Weight of harvested groundnut on the date of harvesting.*	Srs. Chh.		Srs. Chh.	
3. Date of second weighment.				
4. *On the day of second weighment.*	Srs. Chh.		Srs. Chh.	
(a) Weight of dried pods before shelling.				
(b) Weight of groundnut kernel after shelling.				
5. Date of third (final) weighment.				
6. Weight of dried groundnut kernel at final weighment.				
7. Labour employed on date of harvesting.	Men	Women	Children.	Men Women Children.
8. Time taken.				
(a) for digging, collecting pods etc.				
(b) for shelling the pods.				
9. Remarks.				

Date of despatch. Signature of Kamdar.

Note :—1. Weight should be recorded to the nearest half chhatak.

2. Prepare two copies of this orm and send one to the Statistical Adviser, Indian Council of Agricultural Research, Jamnagar, House Mansingh Road, New Delhi.

3*. The produce should be cleaned by rubbing on a piece of cloth to remove earth before weighment.

Appendix II

CALCULATION OF THE COST OF MAINTENANCE OF BULLOCKS.

The method of calculating the cost of maintenance of bullocks has been referred to in the report. In table I, Appendix II are shown for each holding the total expenditure incurred and its components such as fodder, concentrates, grazing etc., as also the net total expenditure on livestock obtained by deducting from the gross expenditure the return from farm yard manure produced by the animals. The table also includes the number of bullock fortnights, cow fortnights, calf fortnights, and other animal fortnights over which this expenditure was incurred. The reason for expressing the expenditure in terms of animal fortnights for each category of animals was to take into account the changes that took place in the number of animals in the holding from time to time.

If x, y, z and t are the costs of maintenance per fortnight of a bullock, calf, cow and an animal in the fourth category respectively and if there are in a holding, A bullock fortnights, B calf fortnights, C cow fortnights and D other animal fortnights, then the sum $Ax + By + Cz + Dt$ can be equated to the total expenditure E. In this manner, we shall obtain one equation for each holding. For the first holding, the equation is $76x = 628$. For the second holding it is $60x + 102y + 39z + 6t = 378$ and so on. Since the number of equations is much greater than the number of variables, we cannot find values of x, y, z and t which will satisfy all the equations. We therefore choose these values such that the quantity $\leq (Ax + By + Cz + Dt - E)^2$ will be minimised, the summation being taken over all equations, 50 in the present case. This is the principle of least squares. The required values of x, y, z and t are obtained by solving a set of simultaneous equations in these variables. These equations are known as normal equations. The co-efficients of x, y, z and t in these equations are the sums of squares and products of the coefficients A, B, C, D and E. In the first equation, for example, the coefficient of x is the sum of squares of A, the coefficient of y is the sum of products AB, the coefficient of z is the sum of products AC and so on. In the second equation, the coefficient of x is the sum of products AB, the coefficient of y is the sum of squares of B and so on. Thus, the equations derived from the present data are:

$$
\begin{aligned}
674590\,x + 543756\,y + 426772\,z + 202639\,t &= 5393455\\
543756\,x + 747340\,y + 428505\,z + 153272\,t &= 4178898\\
426772\,x + 428505\,y + 375490\,z + 132324\,t &= 3478867\\
202639\,x + 153272\,y + 132324\,z + 91048\,t &= 1960384
\end{aligned}
$$

Solving these, we get

$$
\begin{aligned}
x &= 4{\cdot}6225 \pm 0{\cdot}9290\\
y &= -0{\cdot}3041 \pm 0{\cdot}6394\\
z &= 0{\cdot}4416 \pm 1{\cdot}1170\\
t &= 11{\cdot}1132 \pm 1{\cdot}8555
\end{aligned}
$$

These are the estimates of the cost of maintenance per animal per fortnight for animals of different categories together with their sampling errors. The negative value of the estimate of expenditure for a calf fortnight is explained by its sampling error. The estimate of expenditure for maintaining a bullock for a fortnight is Rs. 4·6225 which is the value that we have adopted for calculating the cost of bullock labour in the report.

APPENDIX II

TABLE 1.—EXPENDITURE ON CATTLE MAINTENANCE IN SELECTED HOLDINGS (Rupees).

Village	Name of holder	ANIMAL FORTNIGHTS.				EXPENSES DURING THE YEAR ON				Depreciation on live-stock shed	Total expense	Return as F.Y.M.	Net expenditure.
		Bullock	Calf	Cow	Other	Fodder	Concentrates	Grazing	Misc.				
1	2 3	4	5	6	7	8	9	10	11	12	13	14	15
Masa	1. Sitaram Kondaji	261	198	132	151	1442	1004	364	..	40	2850	325	2525
	2. Vishwanath Uttamrao ..	48	48	48	..	233	80	117	..	..	430	62	368
Redhwa	3. Pundlik Govind	46	..	..	..	108	18	19	..	..	145	..	145
	4. Gyanu Udebhan	41	91	24	..	106	21	109	1	..	237	20	217
Vairatrajapur	5. Mahadeo Pundlik	49	83	84	24	307	106	17	2	8	440	..	440
	6. Sheoram Ganpat	24	9	9	..	138	30	..	1	..	169	..	169
Bhendikaji	7. Kalawatibai w/o Govindrao			Omitted									
	8. Govindrao Hanguji ..			Omitted									
Kaulkhed	9. Sonji Raiji	50	102	39	6	219	69	46	12	32	378	..	378
	10. Rambhau Pundlik ..	76	..	..	..	378	125	39	11	75	628	..	628
Lodhipur	11. Pundlik Sakharam ..	48	78	48	20	247	95	..	..	37	379	7	372
	12. Shamrao Karnaji ..	53	65	48	..	245	78	..	..	10	333	50	283
Sultanpur	13. Hazarimal Chhotumal ..	144	142	96	120	1341	1146	430	92	50	3059	25	3034
	14. Ramchandra Pundaji ..	41	..	24	..	195	36	..	..	..	231	..	231
Karli	15. Namdeo Hiraji	96	140	24	48	363	90	41	10	18	522	50	472
	16. Deoba Tukaram	96	90	6	33	278	66	31	8	18	401	53	348
Mohogawan	17. Govind Bhopaji	106	24	27	72	384	437	57	1	30	909	..	909
	18. Bhagwan Baliram ..	48	24	..	..	245	141	10	3	37	436	..	436
Mohokhed	19. Nathu Narsing	288	58	288	130	1880	1104	231	..	20	3235	75	3160
	20. Hari Krishnaji			Omitted.									
Lothkhed	21. Ayubkhan			No animals.									
	22. Pandhari Ramji			No animals.									
Sawargaon	23. Rambhau Vithooji ..	48	69	24	..	248	73	23	6	3	353	10	343
	24. Shaligram Vishnaji ..	58	84	48	..	172	80	26	..	5	283	10	273
Mahamadabad	25. Asru Eknath	48	59	12	..	404	310	19	3	15	751	..	751
	26. Kashiram Pandhari ..	71	9	20	24	377	314	14	6	51	762	85	677
Jainpurpimpri	27. Dnyandeo	98	80	48	24	522	360	..	..	..	882	175	707
	28. Laxman Nathu	..	..	No animals.									
Marodi	29. Nathu Sampat	120	24	48	..	981	522	33	60	14	1610	..	1610
	30. Rahimatullekhan	..	..	..	24	202	31	18	4	..	255	..	255
Pattiamrai	31. Narayan Sadu	48	67	72	24	108	92	14	1	..	215	13	202
	32. Govind Bhagwan ..			No animals.									
Khandala	33. Narayan Chinkaji ..	74	..	..	18	248	74	..	..	30	252	12	340
	34. Vishwanath Hari	48	24	..	..	217	37	..	..	25	279	..	279
Manki	35. Bhagwan Ramchandra ..	56	79	47	..	132	116	..	..	57	305	7	298
	36. Pandhari			No animals.									
Nagod	37. Amrut Pandurang			Omitted									
	38. Yadav Sampat			Omitted									
Tulanga	39. Sampat Sakharam ..	..	24	24	..	..	..	9	..	..	9	3	6
	40. Raibhau Sambhau ..	48	48	24	..	..	..	6	..	..	6	..	6
Chiwara	41. Baburao Sadu	118	48	72	56	846	272	156	6	12	1922	..	1292
	42. Malangbeg	92	18	19	24	510	90	4	2	..	606	..	606
Kajalamba	43. Mahipati Maroti	48	179	117	..	356	76	6	3	40	481	100	381
	44. Demaji Devji	48	..	..	24	256	153	2	3	14	428	..	428
Tapowan Kd.	45. Dnyanoba	42	30	24	..	98	22	5	17	..	142	..	142
	46. Hari Raghoji	70	26	24	2	139	102	6	..	..	247	10	237
Kurba	47. Rama Daulati	96	98	72	11	249	254	44	9	..	556	..	556
	48. Tukaram Narayan ..	48	47	24	..	139	66	11	1	25	242	..	242
Krishna	49. Tulsiram	192	72	24	..	575	213	90	..	20	898	..	898
	50. Naoji Fakirya	46	..	..	..	63	1	..	..	3	67	3	64
Baldeo	51. Aba Nimbaji	192	554	216	48	358	144	125	..	..	627	..	627
	52. Shrinam Laxman ..	48	16	24	42	863	410	122	1	50	1446	..	1446
Pardi	53. Vithu Satwaji	84	5	24	24	187	164	31	27	12	421	..	421
	54. Tukaram	48	..	..	24	171	123	20	6	2	322	..	322
Pimpri Kd	55. Jairam	144	266	192	11	440	249	..	..	18	707	..	707
	56. Govind Shamji	48	48	24	..	134	55	24	..	20	233	..	233
Chondhi	57. Motiram Govind	456	354	240	120	2254	1253	550	10	30	4097	750	3347
	58. Laxman	30	18	48	..	128	42	..	..	..	170	30	140
Mendara	59. Parasharam	96	92	224	24	177	114	4	1	9	305	..	305
	60. Dasru Raghoji	144	48	96	..	164	94	..	8	10	276	..	276

APPENDIX III—TABLE 1.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL AKOLA													
Masa	1	12	67·16	6·42	35·42	2·79	..	111·79	96·17	15·62	12·66	11·03	1·63
		42	23·92	10·23	25·90	8·67	..	68·72	54·01	14·71	7·71	6·27	1·44
		52/2	49·73	4·56	32·32	5·92	..	92·53	76·66	15·87	10·22	8·81	1·41
		2/1C	32·33	5·96	39·15	5·84	..	83·28	73·19	10·09	10·41	9·31	1·10
		37	33·27	5·84	25·32			64·43	56·11	8·32	7·23	6·24	0·99
	2	60/2	51·76	10·59	85·29	5·38	..	153·02	125·88	27·14	13·92	11·10	2.82
		11/3	20·00	18·00	26·00	2·28	..	66·28	46·00	20·28	7·11	4·81	2·30
Redhwa	3	9	34·00	6·00	38·00	11·73	3·00	92·73	86·73	6·00	11·42	10·62	0·80
	4	84/4	45·09	5·82	13·82	..	..	64·73	..	64·73	8·31	..	08·31
		86	41·34	5·33	52·01	..	..	98·68	2·67	96·01	12·90	0·75	12·15
Viratrajapur	5	14/1	48·01	6·62	21·52	..	..	76·15	35·87	40·28	10·74	5·72	5·02
		40/3	22·48	10·58	24·47	..	..	57·53	23·14	34·39	7·16	2·89	4·27
		11/3	16·46	9·15	18·29	..	..	43·90	11·89	32·01	5·47	1·48	3·99
	6	48/2	54·81	8·89	23·70	..	..	87·40	35·55	51·85	12·51	5·79	6·72
Bhendikaji	7		Omitted.										
	8		Omitted.										
Kaulkhed	9	17/5	120·77	13·61	25·53	..	..	159·91	20·70	139·21	16·04	3·10	12·94
	10	7/2	18·38	10·75	27·12	4·30	..	60·55	60·55	..	6·06	6·06	..
		7/1	15·06	8·31	15·06	9·20	..	47·63	47·63	..	4·43	4·43	..
TEHSIL MURTIZAPUR													
Lodhipur	11	15/2	32·88	5·12	5·11	..	..	43·11	19·09	24·02	4·69	2·01	2·68
		10/2	57·89	4·21	25·26	27·70	..	115·06	22·10	92·96	13·36	2·50	10·86
		1	3·95	4·94	25·42	2·22	..	36·53	15·43	21·10	4·40	1·87	2·53
	12	10/3	23·10	9·01	43·94	..	..	76·05	17·46	58·59	8·92	2·07	·
		24/1	10·50	8·00	21·00	..	..	39·50	14·50	25·00	4·93	1·96	
		24/2	72·46	4·53	31·33	3·82	..	112·14	71·90	40·24	13·95		4·69

APPENDIX III—TABLE 1.—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Murtizapur—contd.													
Sultanpur	13	14/1	32·15	11·21	86·74	10·76	11·21	152·07	126·86	25·21	20·26	16·84	3·42
		118	22·75	7·63	45·21	2·55	3·39	81·53	72·83	8·70	11·90	10·70	1·20
		36	43·16	6·98	40·08	10·51	6·64	107·87	95·49	12·38	15·87	14·38	1·49
		129/1	36·51	8·22	47·11	5·48	1·46	98·78	83·41	15·37	14·04	11·92	2·12
		16/3	26·52	26·09	36·96	10·96	6·09	106·62	92·18	14·44	15·75	13·91	1·84
	14	2	51·23	5·53	32·07	..	..	88·83	61·19	27·64	13·62	9·44	4·18
Karli	15	47/1	16·23	9·06	57·55	..	..	82·84	34·91	47·93	11·27	4·79	6·48
		46/2	18·55	9·28	40·57	..	..	68·40	25·50	42·90	8·23	2·65	5·58
		80	43·26	3·02	28·96	..	..	75·24	19·00	56·24	8·66	2·02	6·64
	16	77/1A	9·60	3·20	22·39	..	..	35·19	5·33	29·86	4·81	0·76	4·05
		17	50·21	5·11	27·24	15·32	..	97·88	..	97·88	10·13	..	10·13
		45	12·55	3·66	32·40	1·49	..	50·10	7·31	42·79	6·73	1·08	5·65
Mohogawan	17	22/1	11·84	8·42	45·54	..	..	65·80	51·32	14·48	8·08	6·18	1·90
		22/1A	24·84	6·86	48·84	..	..	80·54	55·69	24·85	8·33	6·18	2·15
		48/1	16·00	7·46	43·72	..	..	67·18	50·12	17·06	9·96	6·93	3·03
	18	28/2A	78·27	2·61	50·00	..	..	130·88	53·92	76·96	15·15	5·54	9·61
		54/1	16·38	10·53	46·82	10·92		84·65	34·32	50·33	9·54	2·99	6·55
Mohokhed	19	21+25+26	34·51	5·7	15·17	1·83	..	57·27	52·81	4·46	9·91	8·38	0·81
		2/2	12·50	5·56	18·33	4·01	..	40·40	29·45	10·95	6·92	4·90	2·02
	20	12	37·58	6·71	20·27	0·74	..	65·30	64·76	0·54	11·56	11·47	0·09
		1/1	31·52	9.06	17.73	2·28	11·32	71·91	69·27	2·64	13·67	13·18	0·49
		14	16.12	8.96	14.97	0·61	..	40·66	38·90	1·76	7·53	7·02	0·51
Tehsil Akot													
Lothkhed	21	24/2	21·54	12·30	16·92	8·10	..	58·86	21·53	37·33	7·13	2·88	4·25
		58/4	33·55	8·71	51·29	..	..	93·55	50·64	42·91	11·01	5·87	5·14
	22	56/1A	11·91	10·64	14·47	..	..	37·02	37·02	..	4·47	4·47	..

APPENDIX III—TABLE 1.—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL AKOT—contd.													
Sawargaon ..	23	51	10·86	5·14	14·28	2·70	..	32·98	5·90	27·08	5·09	0·98	4·11
		47/1	9·35	5·98	28·91	19·54	..	63·78	14·10	49·68	8·35	1·77	6·58
	24	41/1+42/2	32·45	20·73	28·38	5·46	..	87·02	44·25	42·77	15·48	6·62	8·86
Mahamadabad ..	25	77/3	41·81	14·47	40·40	..	8·44	105·12	66·73	38·39	14·20	9·24	4·96
		75/1	45·64	13·60	40·13	..		99·37	56·20	43·17	13·15	7·53	5·62
	26	11/2	54·26	16·59	19·79	..	7·45	98·09	78·73	19·36	13·60	11·05	2·55
		45/1	103·23	6·84	31·10	..	7·70	148·87	112·29	36·58	18·17	13·40	4·77
Jainpurpimpri ..	27	84/1	30·55	12·31	25·71	..	3·08	71·65	51·43	20·22	12·65	8·90	3·75
		40/5	38·23	8·82	21·77	..	..	68·82	54·12	14·70	12·81	10·25	2·56
		39/1	37·93	10·35	17·24	13·07	..	78·59	69·62	8·97	12·11	10·66	1·45
		82/2	27·54	8·39	54·85	..		90·78	75·69	15·09	18·77	15·74	3·03
		44/2A	45·04	17·10	26·72	10·12	9·47	108·45	70·85	37·60	17·11	11·43	6·68
		45	59·47	10·81	33·51	6·83	4·87	115·49	68·12	47·37	19·41	11·76	7·65
	28	87/1	37·54	6·53	26·94	..	..	71·01	60·40	10·61	14·63	12·49	2·41
Marodi ..	29	28/1	41·43	24·57	27·43	1·43	277·1	122·57	117·14	5·43	15·98	16·28	0·70
		6	49·83	10·05	24·98	1·98	..	86·84	74·28	12·56	9·40	7·92	1·48
		25/3	64·01	14·12	24·94	0·47	7·06	110·60	90·83	19·77	12·91	10·57	2·34
		367/3	41·76	6·53	29·52	2·45	..	80·26	66·10	14·16	9·85	8·18	1·67
		142/1	47·44	6·88	22·92	2·41	22·69	102·34	90·12	3·22	11·77	11·36	0·41
	30		No	Cotton	field								

APPENDIX III—TABLE 1.—contd.
CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey /Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES.		
			Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Balapur													
Pattiamrai ..	31	115/1B	16·84	2·52	31·15	..	..	50·51	5·47	45·04	6·39	0·84	5·55
		316/4+315/1A	30·01	2·12	20·43	..	..	52·56	10·64	41·92	6·89	1·49	5·40
		316/5	22·40	1·92	23·04	..	..	47·36	5·76	41·60	6·17	0·88	5·09
		347/1	6·38	3·83	21·28	..	..	31·49	3·83	27·66	3·99	0·63	3·36
	32	440+441/2	31·04	3·29	14·25	21·00	2·88	72·46	66·29	6·17	11·46	11·09	0·37
Khandala ..	33	16/2	38·16	3·22	18·28	..	..	59·66	59·66	..	6·89	6·89	..
	34	28/1	12·00	5·00	16·00	..	..	33·00	19·00	14·00	5·35	3·52	1·83
		33	20·36	5·35	12·85	..	..	38·56	22·49	16·07	6·60	3·75	2·85
Manki	35	71/3	34·48	5·17	13·80	..	..	53·45	30·69	22·76	6·12	3·10	3·02
	36	81/1	8·18	10·91	5·45	8·00	..	32·54	16·36	16·18	3·49	2·27	1·22
Nagod	37	55	46·14	7·54	20·91	3·88	..	78·47	76·53	1·94	9·13	8·94	0·19
		9/3+13	65·47	6·11	19·84	1·84	..	93·26	92·26	1·00	13·58	13·48	0·10
		23/5	59·18	7·97	24·76	3·30	..	95·51	86·97	8·54	11·24	10·18	1·06
		21/1+22/3	38·20	7·95	25·03	1·64	..	72·82	72·04	0·78	8·02	7·92	0·10
		10+16	25·82	4·72	19·51	..	..	50·05	49·74	0·31	5·70	5·66	0·04
	38	32	86·78	11·77	17·36	1·81	..	117·72	93·35	24·37	15·90	12·87	3·03
		29	59·92	7·47	29·87	..	..	97·26	71·66	25·60	12·34	9·10	3·24
		57/2+58/1+2	56·00	9·41	18·82	2·35	..	86·58	64·23	22·35	12·30	9·53	2·77
		14+15/1+4	97·63	11·07	57·63	6·10	..	172·43	144·07	28·36	20·63	17·25	3·38
Tulanga	39	46/1	35·68	14·05	36·76	..	..	86·49	10·81	75·68	10·23	1·76	8·47
	40	29/2	82·54	11·54	23·46	11·54	..	128·08	20·77	107·31	14·18	3·21	1·97

APPENDIX III—TABLE 1—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BASIM													
Chiwara	41	54/1	122·66	10·67	20·00	—	—	153·33	48·00	105·33	14·41	4·00	10·41
		20/1	51·54	11·17	31·53	—	—	94·24	10·09	84·15	9·83	1·26	8·57
	42	32/1	6·85	6·28	11·99	—	4·56	29·68	15·41	14·27	3·33	1·84	1·49
		66	8·22	11·11	27·55	—	—	46·88	26·22	20·66	5·29	3·05	2·24
		10/1	29·09	3·63	11·88	—	—	44·66	22·79	21·81	5·13	2·95	2·18
		32/4	49·12	4.83	14·77	—	3·21	71·93	41·74	30·19	7·34	4·45	2·89
Kajalamba	43	93/2	17·00	6·00	18·00	—	—	41·00	—	41·00	3·49	—	3·49
		108/1+2	15·86	2·88	36·04	—	—	54·78	1·26	53·52	6·84	0·14	6·70
	44	40/1	14·00	1·00	22·67	—	—	37·67	33·33	4·34	3·58	3·18	0·40
		68/2	15·00	7·00	22·00	—	—	44·00	37·33	6·67	4·21	3·57	0·64
Tapowan	45	1/1	6·00	2·50	25·00	—	—	33·50	12·50	21·00	4·12	1·53	2·59
		11/3B	17·78	2·67	19·56	—	—	40·01	9·78	30·23	4·65	0·89	3·76
		13	16·00	5·45	24·36	—	—	45·81	17·09	28·72	5·84	2·06	3·78
	46	4/1	28·25	5·00	17·75	—	—	51·00	—	51·00	6·37	—	6·37
		28	106·67	20·00	57·34	18·53	—	202·54	—	202·54	23·19	—	23·19
		56	31·66	8·33	13·33	—	—	53·32	—	53·32	6·95	—	6·95
Kurha	47	25	47·47	8·54	18·63	—	6·46	81·10	70·55	10·55	7·98	6·99	0·99
		26	22·00	15·99	21·33	—	5·66	64·98	57·65	7·33	6·20	5·44	0·76
		23/4	87·10	10·66	29·33	1·65	—	128·74	110·52	18·22	13·36	10·82	2·54
	48	40/2	49·92	5·76	38·40	5·22	—	99·30	23·68	75·62	9·90	2·94	6·96
		34/3	68·00	12·00	45·33	5·07	4·00	134·40	49·33	85·07	13·88	5·88	8·00
Krishna	49	70	30·00	4·50	22·00	—	—	56·50	3·50	53·00	6·71	0·41	6·30
		6	86·00	4·50	15·67	—	1·00	107·17	69·00	38·17	10·69	6·71	3·98
		7	50·62	4·50	20·00	—	—	75·12	23·12	52·00	8·16	2·67	5·49
	50	56	87·00	8·00	73·00	3·11	—	171·11	—	171·11	20·65	—	20·65

APPENDIX III—TABLE 1—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Mangrulpir													
Baldeo	51	34/2	106·00	9·00	68·00	..	..	183·00	111·00	72·00	25·84	15·51	10·33
		1/2	32·55	1·86	70·69	3·40	..	108·50	68·83	39·67	14·59	9·33	5·26
		2	41·16	7·54	27·44	0·82	..	76·96	43·04	33·92	10·43	5·63	4·80
		16/4	108·00	12·00	16·00	..	..	136·00	56·00	80·50	23·98	12·12	11·86
	52			No	Cotton	Field.							
Pardi	53	110	44·71	10·59	31·97	0·43	..	87·70	77·66	10·04	9·10	8·00	1·10
	54	36/3	34·68	12·50	27·82	2·05	3·87	80·92	77·90	3·02	10·75	10·64	0·11
Pimpri Kd...	55	97/1	26·78	8.73	37·09	3·23	..	75·83	3·64	72·19	10·45	0·61	9·84
	56	52	23·00	4·00	..	40·66	..	67·66	16·66	52·00	9·87	2·67	7·20
		78/3	47·00	6·75	34·00	..	18·25	106·00	25·50	80·50	15·50	4·75	10·75
Chondhi	57	25	91·12	10·00	80·48	..	..	181·60	176·62	4·98	20·74	20·16	0·58
		2	47·10	8·89	44·22	0·60	..	100·81	96·21	4·60	11·76	11·15	0·61
		5	63·68	10·00	43·38	1·40	..	118·46	110·62	7·84	15·94	14·99	0·95
	58	4/2	96·00	16·00	69·00	..	..	181·00	85·00	96·00	21·20	10·12	11·08
Mendara	59	29	20·67	25·07	2·67	0·77	..	49·18	48·41	0·77	6·15	6·05	0.10
		31	45·89	6·73	17·71	..	..	70·36	70·36	..	7·98	7·98	..
	60	41/2	46·66	8·00	7·11	..	..	61·77	61·77	..	8·15	8·15	..
		42/1	12·80	4·80	6·40	..	..	24·00	24·00	..	2·93	2·93	..
		134/2	37·25	12·00	12·00	..	..	61·25	61·25	..	8·39	8·39	

APPENDIX III—TABLE 1—contd.

CROP COTTON—*Field Sample*

Village	Survey/ Sub-No.	MAN LABOUR IN HOURS.								MONEY VALUE IN RUPEES.		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOLA												
Masa	44	30.25	7.00	34.00	2.64	..	73.89	61.25	12.64	9.13	7.81	1.32
	11/1A	57.60	6.40	28.80	2.51	..	95.31	79.60	15.71	11.65	9.96	1.69
Redhwa	58	64.39	8.52	37.13	16.91	..	126.95	126.95	..	16.66	16.66	..
	21/2	43.33	21.89	23.00	..	..	88.22	69.89	18.33	16.72	14.36	2.36
Vairatrajapur	46/1	53.27	10.20	25.10	30.21	..	118.78	78.37	40.41	14.36	9.49	4.87
	23/3	76.80	7.20	14.80	..	..	98.80	53.60	45.20	11.56	5.83	5.73
Bhendikaji				Omitted								
Kaulkhed	15	126.53	9.93	33.47	1.87	9.08	180.88	158.59	22.29	15.78	14.52	1.26
	17/1	22.94	7.84	17.25	20.01	..	78.04	7.84	70.20	7.41	0.78	6.63
TEHSIL MURTIZAPUR				Omitted								
Lodhipur	29/1	20.07	13.38	23.70	0.84	..	57.99	49.63	8.36	7.12	6.11	1.01
	5	18.92	8.03	24.45	2.53	..	53.93	46.52	7.41	6.00	5.12	0.88
Sultanpur	71	21.81	5.69	13.65	..	..	41.15	39.25	1.90	6.06	5.78	0.28
	15/2	33.84	7.50	31.35	..	..	72.87	66.62	6.25	11.08	10.16	0.92
Karli	63	86.83	5.02	29.97	..	..	121.82	120.83	0.99	15.20	15.10	0.10
	14	54.63	12.68	29.27	..	..	96.58	90.73	5.85	10.06	9.45	0.61
Mohogawan	2/1	92.02	4.00	27.00	..	..	123.02	14.00	109.02	14.76	2.00	12.76
	49/2	17.63	5.42	21.47	..	..	44.52	8.14	36.38	5.74	1.36	4.38
Mohokhed	20	21.00	8.75	20.50	2.73	..	52.98	44.25	8.73	8.85	7.27	1.58
	6/2	36.88	13.68	19.04	..	..	69.60	48.32	21.28	10.64	7.00	3.64

APPENDIX III—TABLE 1—contd.

CROP COTTON—*Field Sample*

Village	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akot												
Lothkhed ..	18/1,C,D. + 19	19.58	9.55	31.56	10.31	..	71.00	68.18	2.82	7.88	7.56	0.32
	50/1 + 50/2A	18.75	8.84	15.88	1.99	..	45.46	24.49	20.97	5.80	3.30	2.50
Sawaragaon ..	31/2	57.67	11.17	43.25	30.70	..	142.79	129.30	13.49	20.66	19.11	1.55
	7/4	27.00	6.00	22.40	5.05	..	60.45	19.45	41.00	9.06	2.56	6.50
Mahamadbad ..	23	12.68	18.06	14.19	..	24.72	69.66	52.24	17.42	9.44	6.91	2.53
	57 + 58/3	33.20	13.70	16.74	6.14	2.28	72.06	42.86	29.20	9.48	5.62	3.86
Jainpurpimpri ..	20	18.18	8.39	22.93	4.71	..	54.21	52.81	1.40	11.06	10.86	0.20
	55/6	12.31	9.23	34.46	27.21	..	83.21	50.62	32.59	16.00	10.29	5.71
Marodi	50	30.88	13.76	28.53	4.29	..	77.46	67.71	9.75	10.17	8.95	1.22
	33/3	41.86	10.36	7.40	15.24	..	74.86	37.40	37.46	10.25	5.61	4.64
Tehsil Balapur												
Pattiamrai	237/2	11·02	5·09	21·20	6·31	7.63	51.25	40.70	10.55	7.17	6.68	0.48
	242/1C		Omitted									
Khandala	65/5	48·24	6·03	26·13	..	3.02	83.42	83.42	..	11.51	11.51	..
	17/2	17·50	6·00	12·50	..	..	36.00	13.50	22.50	5.76	2.94	2.82
Manki	41/4	22·84	5·59	18·88	..	0.81	48.12	47.61	0.51	7.14	7.05	0.09
	96/2	18·37	2·83	5·51	..	..	26.71	13.56	13.15	4.36	1.46	2.90
Nagod			Omitted									
Tulanga	29/1	22·46	7·38	27·38	8·12	35.08	100.42	79.07	21.35	9.64	8.02	1.62
	28/2	14·68	7·34	15·78	2·42	15.96	56.18	35.22	20.96	6.25	4.08	2.17

APPENDIX III—TABLE 1.—Contd.

CROP COTTON—*Field Sample*

Village	Survey/ Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent.
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL BASIM												
Chiwara	1/3	30·00	6·00	28·00	..	..	64.00	12.00	52.00	6.67	1.25	5.42
	37/1A	25·71	17·14	17·14	..	..	59.99	..	59.99	6.35	..	6.35
Kajalamba	37/3A	13·17	5·85	25·36	..	..	44.38	36.09	8.29	3.96	3.20	0.76
	43/2A	30·00	6·43	22·14	..	..	58.57	46.43	12.14	5.62	4.52	1.10
Tapowan	13/1	5·56	2·59	17·78	..	..	25.93	18.52	7.41	2.76	1.95	0.81
	10/1	55·00	5·00	16·00	..	..	76.00	26.00	50.00	9.57	3.25	6.32
Kurha	54	76·78	9·66	55·22	4·60	..	146.26	132.25	14.01	12.20	11.90	1.30
.. ..	57/2	287·61	12·69	49·51	..	..	349.81	270.46	79.35	33.42	26.15	7.27
Krishna	36/2	89·00	9·00	24·00	..	..	122.00	37.50	84.50	11.96	3.64	8.32
	24/1A	60·00	12·00	20·00	..	24.00	116.00	..	116.00	9.76	..	9.76
TEHSIL MANGRULPIR												
Baldeo	14	53·33	3·83	21·00	..	..	78.16	51.75	26.41	9.82	6.02	3.80
	19	12·80	6·30	38·15	3·50	..	60.75	59.40	1.35	8.68	8.50	0.18
Pardi	19/2A	36·00	6·00	24·00	3·70	15.00	84.70	50.50	34.20	9.68	5.93	3.75
	48/7	96·99	10·00	25·99	..	17.00	149.98	120.32	29.66	17.31	13.53	3.78
Pimpri	25	115·55	6·17	31·11	2·96	..	155.79	13.33	142.46	18.89	2.22	16.67
	23/1A	39·51	9·64	11·56	..	..	60.71	32.76	27.95	7.65	4.13	3.52
Chondhi	14	28·33	4·00	36·67	5·02	..	74.02	45.84	28.18	9.00	5.65	3.35
	8	55·55	6·44	50·88	3·32	..	116.19	104.87	11.32	11.33	9.88	1.45
Mendara	65	36·66	7·33	9·33	1·31	..	54.63	23.66	30.97	8.16	4.34	3.82
	3/2	68·57	27·43	64·00	..	..	160.00	160.00	..	17.71	17.71	..

APPENDIX III—TABLE 2.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	12	8·85	5·50	86·70	60·03		161·08	161·08	..	10·74	10·74	..
		42	47·01	5·94	54·92	79·56		187·43	187·43	..	12·28	12·28	..
		52/2	12·43	3·73	63·40	102·34		181·90	181·90	..	10·35	10·35	..
		2/1c	32·34	5·11	91·92	62·25		191·62					
		37	13·28	4·78	52·57	41·55		112·18	112·18	..	8·07	8·07	..
	2	60/2	8·23	10·59	42·35	184·88		246·05	246·05	..	19·42	19·42	..
		11/3	..	18·00	12·00	33·14		63·14	63·14	..	4·08	4·08	..
Redhwa	3	9	13·00	9·00	12·00	31·09		65·09	51·45	13·64	6·24	5·02	1·22
	4	84/4	14·55	8·73	35·63	80·00		138·91	46·98	91·93	12·63	4·57	8·12
		86	36·67	8·00	144·00	85·79		274·46	66·40	208·06	208·65	5·14	18·49
Vairatrajapur	5	14/1	23·18	..	49·11	40·46		112·75	112·75	..	7·37	7·37	..
		40/3	19·84	..	44·30	37·46		101·60	101·60	..	5·69	5·69	..
		11/3	16·46	..	30·18	25·89		72·53	72·53	..	4·20	4·20	..
	6	48/2			84·44	103·70		188·14	188·14	..	11·04	11·04	..
Bhendikaji	7		Omitted										
	8		Omitted										
Kaulkhed	9	17/5	60·00	..	15·32	19·06		94·38	21·18	73·20	8·17	1·32	6·85
	10	7/2	9·00	..	6·75	28·90		44·65	44·65	..	7·25	7·25	..
		7/1	34·28	..	14·02	58·99		107·29	109·29	..	8·94	8·94	..

APPENDIX III—TABLE 2—Contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of Holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Murtizapur													
Lodhipur	11	15/2	26·30	5·12	48·58	48·16		128·16	68·12	60·04	8·55	3·47	5·08
		10/2	52·63	8·42	9·47	22·16		92·68	56·84	35·84	8·25	5·00	3·25
		1	9·38	6·91	27·39	46·50		90·18	33·88	56·30	7·55	2·31	5·24
	12	10/3	30·42	9·02	22·82	72·89		135·15	78·66	56·49	10·79	4·99	5·80
		24/1	24·00	4·00	18·00	17·44		63·44	39·00	24·44	4·93	2·59	2·34
		24/2	5·66	3·02	13·59	37·36		59·63	32·17	27·46	7·39	4·63	2·76
Sultanpur	13	14/1	20·56	4·48	125·97	52·49		203·50	203·50	..	10·96	10·96	..
		118	3·39	4·24	116·86	14·76		139·25	139·25	..	7·95	7·95	..
		36	13·79	2·04	60·17	77·39		153·39	153·39	..	9·38	9·38	
		129/1	15·34		47·11	46·47		108·92	108·92	..	7·46	7·46	..
		16/3	13·91	7·82	101·74	56·34		179·81	179·81	..	11·23	11·23	..
	14	2	11·06	..	163·66	73·53		248·25	248·25	..	20·51	20·51	..
Karli	15	47/1	11·32	2·26	27·17	40·32		81·07	78·81	2·26	7·07	6·88	9·19
		46/2	11·59	2·32	35·16	50·34		99·41	94·77	4·64	10·54	10·21	0·33
		80	13·81	0·75		18·36		32·92	29·11	3·81	3·61	3·25	0·36
	16	77/1A	9·60	4·80	27·72	45·72		87·84	46·31	41·53	6·79	3·55	3·24
		17	13·62	7·66	129·37	100·18		250·83	91·92	158·91	18·66	6·60	12·06
		45	9·15	5·49	31·37	29·58		75·59	34·28	41·31	5·39	2·53	2·86
Mohoghawan	17	22/1	12·63	8·42	61·59	51·57		134·21	126·05	8·16	10·54	9·92	0·62
		22/1A	33·99	6·85	25·70	28·00		184·54	80·97	3·57	7·51	7·23	0·28
		48/1		8·80	18·40	27·07		54·27	52·67	1·60	4·13	4·02	0·11
	18	28/2A	60·01	13·05	37·83	67·96		178·85	158·41	20·44	13·15	11·87	1·28
		54/1	15·61	10·54	80·77	34·14		141·06	128·18	12·88	12·04	11·18	0·86
Mohokhed	19	21+25+26	21·96	4·94	44·12	27·52		98·54	94·43	4·11	12·46	12·01	0·45
		2/2	27·50	4·17	31·11	39·19		101·97	100·43	1·54	11·83	11·64	0·19
	20	12	33·82	4·83	64·42	72·32		175·39	145·39	..	17·91	17·91	..
		1/1	46·42	6·71	30·19	39·01		122·41	122·41	..	14·26	14·26	..
		14	24·02	6·65	37·88	44·41		112·96	112·96	..	11·60	11·60	..

APPENDIX III—TABLE 2.—Contd.
CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21	24/2	21·54	..	15·29	50·20		87·13	42·03	45·10	6·93	2·92	4·01
		58/4	24·20	..	27·74	45·17		97·11	97·11	..	8·96	8·96	..
	22	56/1A	25·53	..	10·21	46·13		81·87	64·85	17·02	6·59	5·01	1·58
Sawargaon	23	51	26·28	0·86	57·40	19·86		104·40	94·47	0·93	7·80	7·24	0·56
..		47/1	28·66	..	55·32	34·61		118·59	118·59	..	9·08	9·08	..
	24	$\frac{41}{1}+\frac{42}{2}$	20·61	..	73·67	16·38		110·66	110·66	..	7·55	7·55	..
Mahamadabad	25	77/3	77·79	1·61	25·31	45·52		159·30	159·30	..	11·71	11·71	..
		75/1	24·95	..	54·29	49·04		128·28	128·28	..	8·05	8·05	..
	26	11/2	..	..	25·75	80·07		105·82	73·69	32·13	8·99	6·41	2·58
		45/1	122·19	..	17·77	64·04		204·00	188·12	15·88	11·46	10·07	1·39
Jainpurpimpri	27	84/1	10·55	..	30·77	27·29		68·61	68·61	..	10·46	10·46	..
		40/5	10·59	..	37·06	15·48		63·13	63·13	..	11·97	11·97	..
		39/1	12·41	..	33·79	21·78		67·98	67·98	..	12·72	12·72	..
		82/2	42·16	..	40·95	42·86		125·97	124·53	1·44	12·31	12·14	0·17
		44/2A	32·83	..	78·34	67·65		178·82	178·82	..	24·19	24·19	..
		45	45·41	..	11·35	60·88		177·64	117·64	..	9·94	9·94	..
	28	87/1	13·06	..	35·10	24·06		72·22	40·00	32·22	13·80	10·46	3·34
Marodi	29	28/1	41·43	1·71	77·42			120·56	120·56	..	9·23	9·23	..
		6	50·74	..	39·00	56·99		146·73	146·73	..	12·18	12·18	..
		25/3	57·18	..	56·47	47·30		160·95	160·95	..	11·36	11·36	..
		367/3	36·04	..	74·39	82·69		193·12	193·12	..	15·65	15·65	..
		142/1	40·68	..	31·63	68·42		140·73	140·73	..	10·52	10·52	..
	30				No Cotton Field								

APPENDIX III—TABLE 2—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BALAPUR													
Pattiamrai ..	31	115/1B	18·94	2·95	47·99	9·33		79·21	40·93	38·28	5·31	2·40	2·91
		$\frac{316}{4}+\frac{315}{1A}$	19·15	4·25	32·99	24·71		81·10	25·32	55·78	6·29	1·51	4·78
		316/5	17·28	2·88	46·72	21·95		88·83	33·40	55·43	6·09	1·87	4·22
		347/1	34·04	3·83	31·49	22·46		91·82	46·14	45·68	6·24	2·24	4·00
	32	$446+\frac{441}{2}$	..	3·29	27·39	35·48		66·16	66·16	..	6·88	6·88	..
Khandala ..	33	16/2	47·30	..	38·16	51·42		136·88	136·88	..	12·45	12·45	..
	34	28/1	23·00	..	12·00	21·74		56·74	56·74	..	3·91	3·91	..
		33	9·28	..	25·36	39·21		73·85	73·85	..	5·61	5·61	..
Manki	35	71/3	13·80	1·72	20·69	54·24		90·45	22·00	68·45	5·98	1·34	4·64
	36	81/1	8·18	..	47·27	18·00		73·45	5·45	68·00	4·07	0·28	3·79
Nagod	37	55	19·22	..	51·98	10·68		81·88	81·88	..	3·98	3·98	..
		9/3+13	17·86	..	86·50	40·52		144·88	144·88	..	7·80	7·80	..
		23/5	29·88	..	44·40	21·57		95·85	95·85	..	5·29	5·29	..
		21/1+22/3	23·39	36·64	29·30	29·30		89·33	89·33	..	4·61	4·61	..
		10+16	14.97		45.48	77·15		137·60	137·60	..	8·77	8·77	..
	38	32	22·64	..	98·26	19·85		140·75	140·75	..	6·03	6·03	..
		29	48·90	..	93·34	54·05		196·29	196·29	..	19·63	19·63	..
		57/2+58/1+2	33·65	..	105·88	6·82		146·35	146·35	..	6·99	6·99	..
		14+15/1+4	61·02	..	147·92	56·95		265·89	265·89	..	9·43	9·43	..
Tulanga	39	46/1	..	5·40	3·24	..		8·64	5·40	3·24	3·09	1·96	1·13
	40	9/2	6·15	1·54	6·92	..		14·61	..	14·61	5·08	..	5·08

APPENDIX III—TABLE 2—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Basim													
Chiwara	41	54/1	20·00	..	..	43·06		63·06	63·06	..	7·64	7·64	..
		20/1	16·58	5·58	61·98	51·99		136·13	127·49	8·64	11·85	11·27	0·58
	42	32/1	25·99	3·14	25·70	22·79		77·62	77·62	..	5·68	5·68	..
		66	15·11	2·00	60·67	22·79		100·57	99·90	0·67	6·49	6·46	0·03
		10/1	27·15	3·88	17·45	22·79		71·77	71·27	..	5·93	5·93	..
		32/4	13·69	4·03	48·31	22·79		88·82	88·02	0·80	6·05	6·02	0·03
Kajalamba	43	93/2	17·00	9·00	26·00	37·80		89·80	13·50	76·30	2·35	0·56	1·79
		108/1+2	8·83	4·32	43·25	35·95		92·35	13·37	78·98	6·41	0·73	5·41
	44	40/1	16·00	1·00	38·67	3·19		85·86	85·86	..	5·61	5·61	..
		68/2	..	7·00	56·34	45·11		108·45	108·45	..	7·88	7·88	..
Tapowan	45	1/1	..	2·50	33·00	22·73		58·23	19·61	38·62	3·54	0·97	2·07
		11/3 B	9·09	2·67	16·00	25·37		47·60	18·04	29·56	2·78	1·06	1·72
		13	9·09	7·27	104·35	44·39		165·30	156·03	9·27	9·93	9·49	0·44
	46	4/1	17·50	2·50	8·75	12·82		41·57	28·64	12·92	2·53	1·84	0·69
		28	17·50	6·67	114·67	109·63		237·04	181·03	56·01	9·77	6·64	3·13
		56	12·67	1·67	10·00	48·46		72·80	43·27	29·53	4·45	2·62	1·83
Kurha	47	25	38·45	7·64	63·09	50·71		159·89	159·98	..	9·36	9·36	..
		26	51·99	16·00	87·32	153·01		308·32	308·32	..	18·31	18·31	..
		23/4	21·33	10·66	79·99	80·51		192·49	192·49	..	12·93	12·93	..
	48	40/2	17·28	5·76	15·36	101·90		140·30	04·80	35·50	0·48	6·9	2·57
		34/3	8·00	6·67	42·00	168·83		225·50	134·43	91·07	13·98	7·37	6·61
Krishna	49	70	4·50	4·50	60·00	37·50		106·50	100·25	6·25	6·47	5·9'	0·54
		6	..	4·50	83·16	35·42		123·08	116·91	6·17	7·60	7·13	0·47
		7	..	4·50	41·25	32·81		78·56	72·56	6·16	6·01	5·55	0·46
	50	56	..	2·00	73·50	45·63		121·13	..	121·13	8·01	..	8·04

APPENEIX III—TABLE 2—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-valent
TEHSIL MANGRULPIR													
Baldeo	51	34/2	7·00	16·00	64·00	154·73		241·73	213·73	28·00	22·40	20·16	2·24
		1/2	23·25	3·72	44·65	79·25		150·87	138·78	12·09	11·82	10·92	0·90
		2	20·94	4·61	19·26	75·76		120·57	116·81	3·76	8·69	8·42	0·27
		16/4		18·00	96·00	154·73		268·73	236·73	32·00	26·95	24·43	2·52
	52		No Cotton Field.										
Pardi	53	110	31·38	..	90·99	48·56		170·93	170·93	..	12·94	12·94	..
	54	36/3	42·25	..	46·69	56·95		145·89	139·27	8·62	10·24	9·49	0·75
Pimpri Kd	55	97/1	17·94		15·99	43·91		77·84	74·81	3·03	8·32	8·13	0·19
	56	52	17·33	4·00	28·00	42·00		91·33	61·33	30·00	7·86	5·09	2·77
		78/3	13·00	6·75	22·50	33·25		75·50	45·75	29·75	6·26	3·74	2·52
Chondhi	57	25	52·50	7·88	78·75	54·91		194·04	194·04	..	13·15	13·15	..
		2	11·11	8·00	70·44	71·88		161·43	161·43	..	13·92	13·99	..
		5	16·50	9·50	123·12	21·09		169·71	167·09	2·62	10·27	10·14	0·13
	58	4/2	14·00	12·00	144·00	93·74		313·74	313·74	..	20·07	20·07	..
Mondara	59	29	9·60	6·40	49·07	37·99		103·06	103·06	..	10·03	10·03	..
		31	25·24	..	37·63	16·63		79·50	79·50	..	6·57	6·57	..
	60	41/2	..	8·00	37·33	28·55		73·88	73·88	..	5·78	5·78	..
		42/1	..	9·60	16·00	27·58		53·18	53·18	..	5·05	5·05	..
		134/2	..	12·00	..	44·74		56·74	56·74	..	5·88	5·88	..

APPENDIX III—TABLE 2—contd.

CROP COTTON—*Field Sample*

Village	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOLA												
Masa	44	32·50	6·00	63·62	60·07		162·19	162·19	..	9·65	9·65	..
	11/1A	20·00	4·80	61·29	35·66		121·66	121·66	..	8·32	8·32	..
Redhwa	58	27·83	7·30	152·54	76·67		264·24	264·24	..	24·48	24·48	..
	21/2	15·35	4·67	90·99	16·24		127·45	127·45	..	10·98	10·98	..
Vairatrajapur	46/1	11·02		17·15	36·37		64·54	62·09	2·45	3·47	3·33	0·14
	23/3	35·20	..	16·80	34·66		86·66	84·26	2·40	5·82	5·68	0·14
Bhendikaji		Omitted										
Kaulkhed	15	39·72	..	40·85	68·64		149·21	80·57	68·64	16·67	4·96	11·71
	17/1	14·12	..	37·65	..		51·77		51·77	3·98		3·98
TEHSIL MURTIZAPUR												
Lodhipur	29/1	..	..	48·51	43·49		92·00	92·00	..	7·61	7·61	..
	5	19·70	0·73	15·69	24·12		60·24	60·24	..	6·36	6·36	..
Sultanpur	71	19·91	3·79	37·54	37·16		98·40	98·40	..	8·26	8·24	..
	15/2	14·42	3·85	45·00	125·32		188·59	188·59	..	16·33	16·33	..
Karli	63	9·62	4·93	14·06	98·62		67·23	67·23	..	5·19	5·14	..
	14	8·78	..	89·76	192·19		290·73	290·73	..	21·89	21·89	..
Mohogawan	2/1	34·00	4·00	34·00	25·20		97·20	56·20	41·00	6·50	3·47	3·07
	49/2	10·17	5·43	18·99	43·93		78·52	28·12	50·40	6·87	2·29	4·58
Mohokhed	20	30·00	5·25	69.00	53·45		157.70	157.70	..	19.26	19·26	..
	6/2	8.80	..	42·24	24.53		75.57	75.57	..	9·42	9.42	..

APPENDIX III—TABLE 2—contd.

CROP COTTON—*Field Sample*

Village	Survey / sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOT												
Lothkhed	18+19	11·58										
	1, C, D	8·85	..	17·12	73·18		101·83	101·83	..	8·43	8·43	..
	50+50		..	16·56	53·56		78·97	72·98	5·49	7·11	6·59	0·52
	1 2A											
Sawargaon	31/2	..	..	192·55	214·88		407·43	407·43	..	13·07	13·07	..
	7/4	48·00	4·00	84·00	34·11		170·11	167·58	2·53	10·72	10·58	0·14
Mahamadabad	23	54·18		122·12	29·57		205·87	205·87	..	10·22	10·22	..
	57+58	83·61	3·42	53·50	56·78		197.31			15·84		
	3											
Jainpurpimpri	20	13·98	..	115·51	38·86		168·35	168·35	..	24·11	24·11	..
	55/6	15·38	..	83·69	24·62		123·69	123·69	..	25·32	25·32	..
Marodi	50	35·12	..	84·10	71·48		190·70	190·70	..	15·33	15·33	..
	33/3	28·15	13·33	35·19	..		76·67	76·67	..	5·19	5·19	..
TEHSIL BALAPUR												
Pattiamrai	237	21·20	5·09	40·69	29·74		96·72	97·72	..	8·95	8·95	..
	2											
	242	Omitted										
	1C											
Khandala	65/5	32·16	..	71·36	34·17		137·69	137·69	..	6·99	6·99	..
	17/2	27·50	..	23·75	18·57		69·82	21·25	48·57	5·51	1·19	4·32
Manki	41/4	42·63	..	35·72	40·77		119·12	112·12	7·00	7·46	7·00	0·46
	96/2	8·48	0·71	83·79	17·73		110·71	778·67	32·04	6·17	4·28	1·89
Nagod		Omitted	..	..	..		..	..	..	..	..	..
Tulanga	29/1	18·46	..	87·39	38·59		144·44	144·44	..	9·09	9·09	..
	28/2	18·35	..	41·29	15·74		75·38	62·31	13·07	3·64	3·12	0·52

APPENDIX III—TABLE 2—contd.

CROP COTTON—*Field Sample*

Village	Survey / sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	1/3	..	6·00	80·00	10·00		96·00	60·00	36·00	4·92	2·50	2·42
	37/1A	..	..	85·72	20·83		106·53	38·75	67·80	4·24	1·99	2·25
Kajalamba	37/3A	17·56	3·90	42·44	31·28		95·18	68·24	26·94	5·82	3·46	2·36
	43/2A	30·00	6·42	95·70	30·36		162·48	103·16	59·32	8·72	5·36	3·36
Tapowan	13/1		2·59	26·68	38·29		67·56	7·79	59·77	3·75	0·37	3·38
	10/1	50·00	5·00	28·00	68·75		151·75	103·00	48·75	8·01	4·97	3·04
Kurha	54	42·65	8·92	64·30	42·20		158·07	158·07		12·84	12·84	
	57/2	104·75	..	92·06	73·85		270·66	257·33	13·33	18·37	17·63	10·74
Krishna	36/2	16·50	3·00	88·50	27·37		135·37	107·87	27·50	7·42	5·68	1·74
	24/1A	42·00	12·00	126·00	58·00		238·00	214·00	24·00	15·01	13·62	1·39
Tehsil Mangrulpir												
Baldeo	14	43·75	7·75	25·00	43·21		127·71	127·71	..	9·90	9·90	..
	19	21·40	5·40	85·00	108·62		220·42	220·42	..	17·55	17·55	..
Pardi	19/2A	30·00	6·00	64·00	48·17		148·17	142·47	5·70	9·36	8·85	0·51
	48/7	21·66	..	39·66	74·58		135·96	115·66	20·24	3·23	6·80	1·93
Pimpri Kd	25	0·25	7·65	63·70	40·99		172·59	140·74	31·85	13·44	9·96	3·48
	23/1A	17·66		38·55	24·74		80·95	64·95	16·00	6·24	4·63	1·61
Chondhi	14	39·19	4·00	75·34	35·18		153·69	153·69	..	10·08	10·08	..
	8	108·43	5·33	90·66	29·86		234·28	234·28	..	12·02	12·03	..
Mendara	65	23·33	12·00	21·66	53·08		110·07	110·07	..	8·99	8·99	..
	3/2	17·14	27·43	158·85	55·57		258·99	258·99	..	22·36	22·36	..

APPENDIX III—TABLE 3

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	12	35·72	5·50	14·65			55·87	..	55·87	19·42	..	19·42
		42	14·35	7·92	9·90			32·17	..	32·17	11·18	..	11·18
		52/2	34·81	3·73	12·85			51·39	..	51·39	17·87	..	17·87
		2/1C	20·43	5·11	40·85			66·39	..	66·39	23·08	..	23·08
		37	23·36	4·78	11·33			39·47	1·59	37·88	13·97	0·80	13·17
	2	60/2	38·82	10·59	22·94			72·35	..	72·35	25·16	..	25·16
		11/3	16·00	18·00	12·00			46·00	..	46·00	15·99	..	15·99
Redhwa	3	9	20·00	6·00	18·50			41·50	..	44·50	15·47	..	15·47
	4	84/4	69·09	5·82	17·46			92·37	..	92·37	32·12	..	32·12
		86	73·33	5·33	24·00			102·66	..	102·66	35·69	..	35·69
Vairatrajapur	5	14/1	15·73	3·32	8·28			27·33	1·66	25·67	9·75	0·83	8·92
		40/3	14·55	5·28	9·92			29·75	2·64	27·11	10·42	0·99	9·43
		11/3	13·72	5·49	7·78			26·99	3·66	23·33	9·48	1·37	8·11
	6	48/2	35·56	8·89	23·70			68·15	8·89	59·26	25·41	4·81	20·60
Bhendikaji	7				Omitted								
	8				Omitted								
Kaulkhed	9	17/5	46·76	6·81	8·93			62·50	..	62·50	21·73	..	21·73
	10	7/2	16·50	5·25	11·50			33·25	1·25	32·00	11·69	0·56	11·13
		7/1	12·46	3·12	7·79			33·37	2·86	20·51	8·30	1·17	7·13

APPENDIX III—TABLE 3— *contd.*

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey/ sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL MURTIZAPUR													
Lodhipur	11	15/2	24·56	5·11	13·42			43·09	4·38	38·71	14·83	1·37	13·46
		10/2	58·94	4·21	12·63			75·78	..	75·78	26·35	..	26·35
		1	10·24	4·44	14·56			29·24	..	29·24	10·17	..	10·17
	12	10/3	15·21	6·76	25·35			47·32	..	47·32	16·45	..	16·45
		24/1	9·00	4·00	10·50			23·50	..	23·50	8·17	..	8·67
		24/2	39·63	3·02	15·28			57·93	20·38	37·55	21·55	8·49	13·06
Sultanpur	13	14/1	25·04	6·73	15·70			47·47	..	47·47	16·50	..	16·50
		118	16·53	5·93	13·14			35·60	..	35·60	12·38	..	12·38
		36	24·00	4·08	15·40			43·48	1·02	42·46	15·04	0·28	14·76
		129/1	15·52	4·38	14·61			34·51	..	34·51	12·00	..	12·00
		16/3	8·70	13·04	12·17			33·91	..	33·91	11·79	..	11·79
	14	2	38·34	5·53	21·01			64·88	23·59	41·29	23·39	9·03	14·36
		47/1	13·21	4·53	27·17			44·91	..	44·91	15·62	..	15·62
Karli	15	46/2	13·91	4·64	17·17			35·91	..	35·94	12·50	..	12·50
		80	34·06	1·51	13·05			48·62	..	48·62	16·90	..	16·90
	16	77/1A	6·40	3·20	11·73			21·33	..	21·33	7·42	..	7·42
		17	35·90	5·11	13·62			53·63	..	53·63	18·65	..	18·65
		45	9·93	3·66	18·82			32·41	..	32·41	11·27	..	11·27
Mohogawan ..	17												
		22/1	9·48	8·42	20·00			37·90	..	37·90	13·18	..	13·18
		22/1A	15·24	7·76	7·16			30·16	..	30·16	12·24	..	12·24
	18	48/1	9·60	5·33	20·26			35·19	..	35·19	17·87	..	17·87
		28/2A	40·00	2·61	19·13			61·74	..	61·74	21·47	..	21·47
		54/1	16·38	8·19	21·07			45·64	..	45·64	15·87	..	15·87
Mohokhed	19	↘											
		21+25+26	34·51	4·94	6·59			46·04	..	46·04	16·01	..	16·01
		2/2	11·67	4·17	6·94			22·78	..	22·78	7·92	..	7·92
	20	12	32·21	5·64	6·71			44·56	..	44·56	15·49	..	15·49
		1/1	25·66	7·92	5·58			39·43	..	39·43	13·71	..	13·71
		14	15·24	7·76	7·16			30·16	..	30·16	10·49	..	10·49

APPENDIX III—TABLE 3.—Contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing.	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21	24/2	12·31	6·15	7·69	..		26·15	26·15	..	9·05	9·05	..
		58/4	9·36	3·87	8·06	..		21·29	21·29	..	7·86	7·86	..
	22	56/1A	9·36	4·68	7·23	..		21·27	21·27	..	9·42	9·42	..
Sawargaon	23	51	9·57	2·57	5·43	..		18·57	1·71	15·86	7·80	0·50	7·30
		47/1	7·48	5·98	12·71	3·93		30·10	..	30·10	9·08	..	9·08
	24	$\frac{41}{1}+\frac{42}{2}$	21·96	8·88	11·10	..		41·94	15·05	26·89	7·55	5·03	2·52
Mahamadabad	25	77/3	17·89	4·83	8·44	..		31·16	3·22	27·94	11·71	1·41	10·30
		75/1	16·75	5·62	6·07	..		28·44	1·35	27·09	8·05	1·01	7·04
	26	11/2	28·09	8·09	5·11	..		41·29	..	41·29	8·99	..	8·99
		45/1	28·03	5·47	8·54	..		42·04	..	42·04	11·46	..	11·46
Jainpurpimpri	27	84/1	22·86	7·03	11·87	..		41·76	1·32	40·44	14·50	0·44	14·06
		40/5	11·76	5·29	9·41	..		26·46	..	26·46	9·20	..	9·20
		39/1	13·79	6·21	6·21	..		26·21	..	26·21	9·11	..	9·11
		82/2	16·76	5·03	11·50	..		33·29	..	33·29	11·57	..	11·57
		44/2A	29·78	9·77	12·37	..		51·92	..	51·92	18·05	..	18·05
		45	29·73	6·49	11·08	..		47·30	..	47·30	16·45	..	16·45
	28	87/1	24·49	4·08	9·80	..		38·37	38·37	..	15·76	15·76	..
Marodi	29	28/1	17·41	11·71	13·71	1·43		44·26	4·00	40·26	9·23	1·71	7·52
		6	21·03	4·57	9·52	..		35·12	1·83	33·29	12·18	0·99	11·19
		25/3	27·76	7·06	7·53	..		44·35	2·82	39·53	11·36	1·41	9·95
		367/3	18·22	3·26	8·43	1·22		31·13	6·39	24·74	15·65	2·79	12·86
		142/1	28·65	2·76	7·79	1·72		40·92	1·38	39·54	10·52	0·69	9·83
	30		No Cotton Field.										

APPENDIX III—TABLE 3—Contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equi-valent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Balapur													
Pattiamrai	31	115/1B	10·52	2·52	11·37	..		24·41	1·26	23·15	8·89	0·84	8·05
		$\frac{316}{4}+\frac{315}{1A}$	13·83	2·12	10·21	..		26·16	1·06	25·10	9·58	0·85	8·73
		316/5	17·60	1·92	11·52	..		31·04	7·36	23·68	12·71	4·48	8·23
		347/1	6·38	3·83	9·36	..		19·57	2·55	17·02	7·20	1·28	5·92
	32	$440+\frac{441}{2}$	29·22	3·29	5·48	..		37·99	37·99	..	11·77	11·77	..
Khandala	33	16/2	38·16	1·61	9·14	..		48·91	20·42	28·49	15·20	5·30	9·90
	34	28/1	10·00	2·00	8·00	..		20·00	4·00	16·00	7·16	1·60	5·56
		33	16·07	2·14	6·42	..		24·63	3·57	21·06	8·74	1·42	7·32
Manki	35	71/3	20·68	1·72	5·52	..		27·92	10·34	17·58	11·28	5·17	6·11
	36	81/1	2·73	2·73	2·73	..		8·19	8·19	..	3·86	3·86	..
Nagod	37	55	33·84	3·23	10·46	..		47·53	..	47·53	15·16	..	15·16
		9/3+13	24·20	3·33	9·92	..		37·45	..	37·45	15·76	..	15·76
		23/5	36·29	2·99	10·75	..		50·03	..	50·03	14·56	..	14·56
		$\frac{21}{1}+\frac{22}{3}$	22·22	3·74	11·23	..		37·19	..	37·19	16·11	..	16·11
		10+16	13·24	2·76	9·06	..		25·06	..	25·06	16·53	..	16·53
	38	32	29·43	3·62	10·56	..		43·61	..	43·61	13·02	..	13·02
		29	29·16	3·73	12·45	..		45·34	..	45·34	17·40	..	17·40
		57/2+58/1+2	28·94	3·53	9·41	..		41·88	..	41·88	12·93	..	12·93
		14+15/1+4	30·51	4·75	11·07	..		46·33	..	46·33	8·71	..	8·71
Tulanga	39	46/1	17·30	..	4·32	76·88		98·50	17·30	81·20	1·07	0·88	0·19
	40	29/2	10·76	..	..	23·93		34·69	14·78	19·91	1·69	1·41	0·29

APPENDIX III—TABLE 3—contd.

CROP COTTON.—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEE		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BASIM													
Chiwara	41	54/1	98.66	5.33	12.00	..		115.99	..	115.99	40.33	..	40.33
		20/1	36.76	8.65	10.09	..		55.50	..	55.50	19.30	..	19.30
	42	32/1	6.85	4.71	6.00	..		17.56	..	17.56	6.10	..	6.10
		66	6.11	6.00	13.78	..		25.89	..	25.89	9.00	..	9.00
		10/1	17.94	3.88	6.30	..		28.12	..	28.12	9.78	..	9.78
		32/4	35.43	6.04	7.11	..		48.58	..	48.58	16.89	..	16.89
Kajalamba	43	93/2	11.00	6.00	8.00	..		25.00	..	25.00	5.91	..	5.91
		108/1+2	9.55	2.88	..	..		12.43	..	12.43	10.20	..	10.20
	44	40/1	6.00	1.00	10.00	..		17.00	..	17.00	5.91	..	5.91
		68/2	13.00	7.00	9.34	..		29.34	..	29.34	10.20	..	10.20
Tapowan..	45	1/1	66.00	2.50	12.50	..		21.00	..	21.00	7.30	..	7.30
		11/3B	14.22	2.67	9.78	..		26.67	..	26.67	9.27	..	9.27
		13	13.63	5.45	12.18	..		29.81	1.45	28.36	10.63	0.27	10.36
	46	4/1	23.50	3.75	9.75	..		37.00	..	37.00	12.86	..	12.86
		28	83.33	13.33	36.00	..		132.66	..	132.66	46.12	..	46.12
		56	25.00	3.33	6.67	..		35.00	..	35.00	12.17	..	12.17
Kurha	47	25	34.73	7.64	8.09	0.73		51.19	..	51.19	17.80	..	17.80
		26	2.00	16.00	13.00	..		31.00	..	31.00	10.78	..	10.78
		23/4	65.77	10.66	11.33	..		87.76	8.00	79.76	31.06	3.33	27.73
	48	40/2	32.64	5.76	20.48	..		58.88	7.68	51.20	21.00	3.20	17.80
		34/3	52.00	6.67	9.33	..		68.00	8.00	60.00	24.19	3.33	20.86
Krishna	49	70	28.50	4.50	11.00	..		44.00	..	44.00	15.30	..	15.30
		6	24.00	4.50	7.83	..		36.33	..	36.33	12.63	..	12.63
		7	36.00	4.50	10.00	..		50.50	..	50.50	17.56	..	17.56
	50	56	113.50	6.00	12.50	..		132.00	..	132.00	45.90	..	45.90

APPEDIX III—TABLE 3—contd.

CROP COTTON—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Mangrulpur													
Baldeo	51	34/2	90·00	14·00	35·00	..		139·00	..	139·00	48·38	..	48·33
		1/2	9·30	5·58	32·35	1·94		49·38	..	49·38	17·17	..	17·17
		2	32·78	6·81	15·18	1·09		55·86	..	55·86	19·42	..	19·42
		16/4	96·00	12·00	16·00	..		124·00	..	124·00	43·11	..	43·11
	52			No Cotton Field.									
Pardi	53	110	26·47	5·29	15·68	..		47·44	15·29	32·15	19·77	4·41	15·36
	54	36/3	26·53	5·00	20·64	..		52·17	6·45	45·72	15·59	3·87	11·72
Pimpri Kd	55	97/1	23·27	4·06	17·45	..		45·08	..	45·08	15·67	..	15·67
	56	52	14·66	4·00	23·66	..		42·32	..	42·32	14·71	..	14·71
		78/3	38·75	6·75	20·50	..		66·00	..	66·00	22·95	..	22·95
Chondhi	57	25	71·62	10·00	29·75	..		111·37	..	111·37	38·72	..	38·72
		2	42·66	8·89	21·33	..		72·88	..	72·88	25·34	..	25·34
		5	43·50	10·00	29·25	..		82·75	..	82·75	28·77	..	28·77
	58	4/2	72·00	8·00	54·00	..		134·00	..	134·00	46·59	..	46·59
Mendara	59	29	15·00	16·00	1·33	..		32·33	4·80	27·53	14·97	1·20	10·77
		31	37·86	7·34	8·87	..		54·07	2·45	51·62	19·17	0·61	18·56
	60	41/2	38·33	8·00	3·56	..		49·89	6·00	43·89	19·26	2.0	17·26
		42/1	12·80	4·80	3·20	..		20·80	4·80	16·00	7·16	1·60	5·56
		134/2	31·25	12·00	..	6·00		49·25	9·50	39·75	16·82	3·00	13·82

APPENDIX III—TABLE 3—Contd.

CROP COTTON—*Field Sample*

Village	Survey/ sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akola												
Masa	44	22·50	6·00	16·00	..	...	44·50	..	44·50	15·47	..	15·47
	11/1A	36·00	4·80	12·80	..	..	33·60	..	33·60	18·64	..	18·64
Redhawa	58	42·00	8·50	15·83	..	..	66·35	..	23·07	23·07	..	23·07
	21/2	42·77	4·67	14·00	..	..	61·44	..	21·36	21·36	..	21·36
Vairatrajapur	46/1	27·55	4·49	7·35	..	3·67	43·06	..	43·06	14·97	..	14·97
	33/3	51·60	3·60	7·40	..	..	62·60	..	62·60	21·77	..	21·77
Bhendikaji				Omitted								
Kaulkhed	15	39·72	2·55	13·62	..	..	55·89	..	55·89	19·43	..	19·43
	17/1	14·12	9·41	14·12	..	..	37·65	37·65	..	15·68	15·68	..
Tehsil Murtizapur												
Lodhipur	29/1	3·34	6·69	11·15	..	..	21·18	..	21·18	7·36	..	7·36
	5	17·51	2·19	9·49	..	..	29·19	..	29·19	10·15	..	10·15
Sultanpur	71	18·01	5·69	6·82	..	..	30·52	30·52	..	10·21	10·21	..
	15/2	33·84	5·96	15·38	..	..	55·18	1·15	54·03	19·03	0·24	18·79
Karli	63	59·69	4·36	13·57	..	..	77·62	..	77·62	26·99	..	26·99
	14	35·12	6·83	14·63	..	..	56·58	..	56·58	19·67	..	19·67
Mohogawan	2/1	72·01	4·00	12·00	..	..	88·01	..	88·01	30·60	..	30·60
	49/2	10·85	5·42	12·66	..	..	28·93	..	28·93	10·60	..	10·60
Mohokhed	20	9·50	7·00	8·25	..	..	24·75	..	24·75	8·60	..	8·60
	6/2	25·44	4·56	9·20	..	..	39·20	..	39·20	13.63	..	13·63

APPENDIX III—TABLE 3—contd.

CROP COTTON—*Field Sample*

Village	Survey / sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Harvesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akot												
Lothkhed	18 / 1,C,D, +19	15·47	4·67	9·41	..	..	29·55	..	29·55	10·27	..	10·27
Sawargaon	50/1 + 50/2A	9·60	4·23	7·94	..	..	21·77	..	21·77	7·57	..	7·57
	31/2	33·49	4·18	13·95	..	..	51·62	..	51·62	17·95	..	17·95
Mahamadabad	7/4	20·00	3·00	9·40	..	..	32·40	4·00	28·40	11·87	2·00	9·87
	23	4·94	7·74	5·38	..	..	18·06	18·06		6·70	6·70	
Jainpur Pimpri	57+58/3	16.17	4·56	7·89	0·88	..	29·50	..	29·50	10·26	..	10·26
	20	5·59	4·20	8·67	..	..	18·46	..	18·46	6·42	..	6·42
Marodi	55/6	6·15	5·54	17·85	..	..	29·54	..	29·54	10·27	..	10·27
	50	16·38	6·88	8·58	0·64	..	32·48	1·90	30·38	11·65	1·02	10·63
Tehsil Balapur	33/3	19·63	4·44	3·70	..	..	27·77	26·66	1·11	12·78	12·40	0·38
Pattiamrai	237/2	7·63	5·09	8·48	..	..	21·20	..	21·20	7·37	..	7·37
	242/1C			Omitted								
Khandala	65/5	35·17	3·01	12·06	..	..	50·24	2·00	48·24	17·67	0·90	16·77
	17/2	12·50	6·00	12·50	..	..	31·00	3·75	27·25	10·22	0·75	9·47
Manki	41/4	14·21	2·03	6·70	..	..	22·94		22·94	7·98	..	7·98
	96/2	14·85	4·24	1·84	..	..	20·93	6·38	14·55	7·61	2·55	5·06
Nagod				Omitted								
Tulanga	29/1	9·23	3·69	9·23	..	1·54	23·69	..	23·69	8·24	..	8·24
	28/2	9·18	2·94	6·97	..	0·92	20·01	..	20·01	6·96	..	6·96

APPENDIX III—TABLE 3—Contd.

CROP COTTON—*Field Sample*

Village	BULLOCK LABOUR IN HOURS									MONEY VALUE IN RUPEES.		
	Survey/ sub-No.	Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	1/3	18·00	6·00	14·00	..	..	38·00	..	38·00	13·21	..	13·21
Kajalamba	37/1A	8·57	8·57	11·42	..	..	28·57	..	28·57	9·93	..	9·93
	37/3A	11·71	3·90	12·68	..	..	28·29	..	28·29	15·77	..	15·77
Tapowan	43/2A	25·71	8·57	11·07	..	..	45·35	..	45·35	9·84	..	9·84
	13/1	2·96	2·59	8·89	..	..	14·44	..	14·44	5·02	..	5·02
Kurha	10/1	45·00	5·00	8·00	..	..	58·00	..	58·00	20·17	..	20·17
	54	69·23	8·92	24·98	0·36	..	103·49	..	103·49	35·98	..	35·98
	57/2	213·33	6·35	15·24	..	..	234·92	..	234·92	95·96	..	95·96
Krishna	36/2	65·00	6·00	12·00	..	..	83·00	..	83·00	28·86	..	28·86
	24/1A	48·00	12·00	10·00	..	..	70·00	..	70·00	24·34		24·34
Tehsil Mangrulpir												
Baldeo	14	34·16	3·83	10·50	1·62	..	48·49	..	48·49	16·86	..	16·86
	19	10·50	5·40	17·30	..	..	34·82	..	34·82	12·11	..	12·11
Pardi	19/2A	26·00	6·00	11·00	..	..	43·00	..	43·00	14·95	..	14·95
	48/7	80·66	4·00	12·00	..	1·67	98·33	..	98·33	34·19	..	34·19
Pimpri Kd	25	62·22	6·17	17·78	..	2·96	89·13	..	89·13	30·99	..	30·99
	23/1A	11·56	3·85	7·71	..		23·12	23·12		13·33	13·33	
Chondhi	14	21·67	4·00	16·00	..	..	41·67	2·67	39·00	14·56	1·00	13·56
	8	37·77	6·22	14·22	..	..	58·21	..	58·21	20·24		20·24
Mendara	65	34·16	10·00	4·00	..	..	40·16	11·00	29·16	17·64	7·50	10·14
	3/2	66·28	27·42	32·00	..	..	125·70	66·28	59·42	44·66	24·00	20·66

APPENDIX III—TABLE 4

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease Value in Rs.	Watch in Rs.	Imple-ments in Rs.	Total money value in Rs.
			Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	13	12
Tehsil Akola											
Masa	1	12	20·16	2·44	..	..	1·50	..	1·43	0·43	48·62
		42	19·23	2·33	..	..	1·89	..	2·06	0·43	37·88
		52/2	23·69	2·87	10·36	31·08	2·85	..	..	0·43	75·67
		2/1C	19·45	2·35	..	..	2·65	..	..	0·43	54·42
		37	20·16	2·94	..	..	2·66	..	..	0·43	35·30
	2	60/2	20·16	2·44	9·00	27·00	2·51	..	..	0·63	51·08
		11/3	18·28	2·21	..	..	3·62	20·00	..	0·63	53·64
			16·36	2·30	..	..	1·18	..	..	0·36	36·97
Redhawa	3	9									
	4	84/4	16·80	1·90	..	..	1·40	..	..	0·32	56·74
		86	15·40	1·74	..	..	2·52	..	..	0·32	76·80
Vairatrajapur	5	14/1	12·87	1·83	..	..	3·5[illegible]	..	..	0·45	33·70
		40/3	14·69	1·46	..	..	3·39	..	..	0·45	28·57
		11/3	10·67	1·52	..	..	3·66	..	..	0·45	24·78
	6	48/2	17·28	2·47	..	..	2·94	..	..	2·09	56·46
Bhendikaji	7 }										
	8 }		Omitted								
Kaulkhed	9	17/5	9·08	0·85	..	..	1· 4	..	..	3·17	51·70
	10	7/2	10·16	1·07	..	..	3·47	..	..	0·66	30·20
		7/1	9·74	1·05	..	..	3·61	..	..	0·66	26·99

APPENDIX III—TABLE 4—Contd.

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / sub No.	SEED		MANURE		Rent in Rs.	Lease Value in Rs.	Watch in Rs.	Imple-ments in Rs.	Total money value in Rs.
			Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Murtizapur											
Lodhipur	11	15/2	11·73	1·68	..	..	1·67	..	..	0·44	31·86
		10/2	9·74	1·35	..	..	1·98	..	..	0·44	51·73
		1	7·65	1·08	..	..	1·70	9·13	..	0·44	34·47
	12	10/3	16·48	2·36	..	..	1·98	..	..	0·99	41·49
		24/1	5·62	0·81	..	..	1·84	..	..	0·99	21·67
		24/2	10·62	1·51	..	..	3·03	..	..	0·99	48·42
Sultanpur	13	14/1	14·36	1·69	..	..	2·83	10·87	..	0·61	63·72
		118	11·87	1·59	..	..	1·93	..	0·14	0·61	36·50
		36	14·29	2·42	2·04	8·17	2·43	..	..	0·61	53·92
		129/1	17·97	2·12	..	..	2·99	..	..	0·61	39·22
		16/3	19·30	2·27	..	..	2·04	..	..	0·61	43·69
	14	2	12·04	1·42	..	..	1·96	..	..	0·66	61·56
Karli	15	47/1	21·13	2·26	..	..	1·29	1·55	2·64	0·51	42·21
		46/2	23·18	2·48	..	..	1·17	1·55	2·90	0·51	39·88
		80	10·04	1·07	..	..	1·30	..	..	0·51	32·05
	16	77/1A	14·22	1·52	..	..	1·16	65·33	..	0·56	87·59
		17	20·42	2·19	..	..	1·19	..	..	0·56	51·38
		45	8·37	0·90	..	..	1·20	25·54	..	0·56	61·59
Mohogawan	17	22/1	20·64	1·84	..	..	1·03	..	..	0·91	35·58
		22/1A	16·93	1·51	..	..	1·39	17·93	..	0·91	46·44
		48/1	14·00	1·25	9·99	19·99	1·35	4·15	..	0·91	59·61
	18	28/2A	17·24	1·58	25·36	50·72	0·75	..	..	1·46	104·28
		54/1	20·71	1·85	..	..	1·12	7·98	..	1·46	49·86
Mohokhed	19	21+25+26	18·30	2·94	2·06	6·17	1·93	..	..	0·47	49·17
		2/2	8·64	1·39	..	..	1·34	..	..	0·47	29·87
	20	12	11·22	0·98	..	..	2·39	..	..	0·68	49·01
		1/1	11·62	1·87	..	..	1·14	..	..	0·68	45·33
		14	12·80	1·30	..	..	1·57	..	..	0·68	33·17

APPENDIX III—TABLE 4—contd.

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / Sub-No.	SEED		MANURE		Rent in Rs.	Lease in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Akot											
Lothkhed	21	24/2	8·10	2–02	..	..	4·20	25·00	..	0·43	54·76
		58/4	10·53	1·15	..	..	3·54	..	1·02	0·43	33·88
	22	56/1A	8·51	1·29	2·25	6·75	4·11	..	0·85	0·87	34·36
Sawargaon	23	51	9·13	1·35	2·14	6·42	5·39	..	..	0·25	32·22
		47/1	7·34	1·11	..	..	5·96	31·15	..	0·25	66·36
	24	$\frac{41}{1} + \frac{42}{2}$	10·92	1·95	2·60	7·80	5·06	..	..	0·42	52·64
Mahamadabad	25	77/3	12·28	2·19	2·61+64 lb. oilcake	11·69	4·42	23·07	0·94	0·33	79·67
		75/1	19·86	2·38	126 lb. oilcake	12·64	3·24	20·45	2·75	0·33	73·42
	26	11/2	19·96	2·73	1·92	5·76	8·33	8·33	0·85	0·51	63·43
		45/1	9·35	1·34	5·81	14·33	3·86	..	..	0·51	64·49
Jainpurpimpri	27	84/1	6·94	1·03	..	..	3·94	20·89	..	0·25	63·72
		40/5	11·32	1·68	..	..	3·15	..	..	0·25	39·06
		39/1	14·52	2·15	..	..	2·80	23.08	..	0·25	62·22
		82/2	14·06	2·08	19·16	..	..	3.92	..	0·25	99·20
		44/2A	12·86	1·90	1·98	50·30	1·11	..	..	0·25	68·57
		45	11·38	1·68	..	5·96	3·05	..	..	0·25	50·78
	28	87/1	8·16	1·21	..	..	2·95	..	..	0·62	48·97
Marodi	29	28/1	21·14	3·12	..	..	3·13	..	1·14	1·05	49·36
		6	14·48	2·10	..	..	1·94	..	1·37	1·05	40·60
		25/3	10·84	1·54	Sheep folding	35·30	3·77	..	..	1·05	81·08
		367/3	10·88	1·53	..	..	2·80	..	0·27	1·05	42·54
		142/1	11·23	1·52	Sheep folding	17·19	4·76	..	0·25	1·05	61·50
	30		No	Cotton	Field						

APPENDIX III—TABLE 4—contd.

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / Sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
TEHSIL BALAPUR											
Pattiamrai	31	115/1B	8·89	0·83	..	..	0·15	26·68	..	0·33	48·58
		$\frac{316}{4}+\frac{315}{1A}$	12·35	1·29	0·06	0·18	1·08	..	..	0·33	25·64
		316/5	11·48	1·08	..	..	1·21	35·96	..	0·33	63·55
		347/1	12·13	1·14	..	..	3·20	29·11	..	0·33	51·21
	32	$440+\frac{441}{2}$	9·21	1·44	..	..	1·84	18·26	1·83	0·16	53·64
Khandala	33	16/2	16·09	1·96	..	..	3·57	8·63	..	0·33	49·03
	34	28/1	9·13	1·30	..	..	3·26	29·03	..	0·29	50·30
		33	10·25	1·40	..	..	3·59	..	..	0·29	26·23
Manki	35	71/3	7·96	0·97	..	..	1·36	..	..	0·43	26·14
	36	81/1	11·00	1·34	..	..	1·66	6·35	..	1·47	22·24
Nagod	37	55	10·16	1·24	..	..	3·80	..	..	0·33	35·01
		9/3+13	10·28	1·25	Sheep folding	57·54	2·63	..	..	0·33	96·15
		23/5	10·28	1·25		33·70	2·70	..	..	0·33	71·91
		$\frac{21}{1}+\frac{22}{3}$	10·67	1·30	..	..	3·07	..	..	0·33	30·26
		10+16	10·37	1·26	..	..	3·54	..	0·32	0·33	28·63
	38	32	10·56	1·32	Sheep	9·81	2·56	..	..	0·87	51·65
		29	12·45	1·56	folding	..	3·16	10·34	..	0·87	63·66
		57/2+58/1+2	11.76	1·47	..	..	2·10	..	..	0·87	38·29
		$14+\frac{15}{1+4}$	5·99	1·50	..	..	3·70	..	1·36	0·87	53·60
Tulanga	39	46/1	19·22	3·00	1·23	3·69	2·37	..	..	0·29	23·74
	40	29/2	14·53	2·14	..	..	2·70	..	..	0·22	26·01

APPENDIX III—TABLE 4—Contd.

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ sub No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4		6	7	8	9	10	11	12
Tehsil Basim											
Chiwara	41	54/1	13·89	1·89	..	..	0·53	..	..	1·59	66.39
		20/1	15·01	2·04	..	..	0·88	..	..	1·59	45·49
	42	32/1	17·14	2·33	..	..	1·46	..		0·81	19·71
		66	15·10	2·05	..	..	0·86	..	..	0·81	24·50
		10/1	14·54	1·98	..	..	1·00	..	..	0·81	24·63
		32/4	15·14	2·06	..	..	0·55	..	..	0·81	33·70
Kajalamba	43	93/2	13·19	1·80	..	..	0·65	5·62	..	0·44	23.04
		108/1+2	11·35	1·99	7·20	21·60	0·99	..	..	0·44	42·32
	44	40/1	18·66	2·80	..	..	1·53	..	..	0·42	19.85
		68/2	10·18	1·53	..	..	0·68	..	..	0·42	24.92
Tapowan	45	1/1	5·29	0·72	..	..	1·56	..	..	0·37	17.11
		11/3B	4·70	0·64	2·00	6·00	2·11	..	..	0·37	25·82
		13	16·33	2·22	..	..	1·33	34·02	..	0·37	64·34
	46	4/1	6·68	0·80	..	..	1·37	38·00	..	0·91	63·20
		28	14·25	1·94	..	..	1·45	38·00	..	0·91	121·38
		56	9·98	1·36	..	..	1·12	38·00	..	0·91	64·96
Kurha	47	25	10·62	1·45	..	..	0·75	..	..	0·99	38·33
		26	17·00	2·31	..	..	0·74	..	..	0·99	39·33
		23/4	9·44	1·28	..	..	0·56	..	..	0·99	60·18
	48	40/2	12·52	1·70	..	..	0·71	..	..	0·93	43.72
		34/3	13·04	1·78	9·33	27·99	1·37	..	..	0·93	84.12
Krishna	49	70	16·27	2·22	..	..	0·29	..	..	0·61	31·60
		6	15·27	1·79	..	..	1·26	..	..	0·61	34·58
		7	16·66	1·95	..	..	0·72	..	..	0·61	33·06
	50	56	16·59	2·07	..	..	0·21	..	..	0·56	77·43

APPENDIX III—TABLE 4—Contd.

CROP COTTON—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / sub No.	SEED		MANURE		Rent Rs.	Lease value Rs.	Watch Rs.	Imple-ments Rs.	Total money value in Rs.
			Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Mangrulpir											
Baldeo	51	34/2	7·32	0·52	7·83	23·49	1·50	..	..	1·03	123·11
		1/2	9·72	0·73	..	..	2·18	..	..	1·03	47·52
		2	12·26	0·88	33·16	99·48	1·47	..	..	1·03	141·40
		16/4	14·64	1·04	24·00	48·00	1·02	..	..	1·03	144·13
	52		No	Cotton	field						
Pardi	53	110	9·62	1·35	..	..	1·63	45·88	..	1·13	87·62
	54	36/3	17·78	2·40	4·33	12·99	1·72	..	..	0·66	58·53
Pimpri Kd.	55	97/1	16·16	1·85	..	..	0·72	..	..	0·41	37·42
	56	52	9·33	1·38	1·97	5·91	0·63	..	..	0·80	41·16
		78/3	21·88	2·26	7·83	23·49	0·96	..	..	0·80	72·22
Chendhi	57	25	13·74	1·16	..	..	0·35	..	..	0·37	74·49
		2	14·28	1·02	..	..	0·48	..	..	0·37	52·89
		5	12·05	0·86	..	..	0·39	..	..	0·37	56·60
	58	4/2	14·99	1·16	6·00	18·00	1·80	..	..	0·49	109·76
Mendara	59	29	27·88	2·60	..	..	1·16	..	..	0·64	31·25
		31	11·19	1·05	..	..	0·99	65·31	..	0·64	101·10
	60	41/2	7·02	0·66	..	..	0·86	..	..	0·72	33·43
		42/1	6·45	0·60	..	..	1·54	..	..	0·72	18·00
		134/2	8·42	0·77	..	..	3·37	..	..	0·72	35·95

APPENDIX III—TABLE 4—Contd.

CROP COTTON—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey / Sub-No.	SEED		MANURE		Rent Rs.	Lease value Rs.	Watch Rs.	Implements	Total money value in Rs.
		Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
TEHSIL AKOLA										
Masa	44	20·16	2·44	..	..	..	..	..	..	36·69
	11/1A	16·46	2·16	..	..	..	..	..	..	40·77
Redhawa	58	13·39	1·88	..	..	..	..	..	..	66·09
	21/2	16·97	2·39	..	..	..	..	..	..	51·54
Vairatrajapur	46/1	10·78	1·57	..	..	..	..	..	..	34·37
	23/3	12·44	1·78	7·20	21·60	..	..	..	..	62·53
Bhendikaji		Omitted								
Kaulkhed	15	12·48	1·36	..	..	..	..	..	..	53·24
TEHSIL MURTIZAPUR	17/1	13·34	1·46	..	..	..	..	..	...	28·53
Lodhipur	29/1	12·55	1·80	..	..	..	..	..	..	23·89
	5	7·66	1·09	..	..	..	..	..	..	23·66
Sultanpur	71	9·29	1·23	..	..	..	..	..	..	25·70
	15/2	12·92	1·71	..	..	..	..	..	..	79·64
Karli	63	15·78	1·69	7·83	31·49	..	..	..	..	49·07
	14	10·73	1·10	..	..	..	..	..	..	52·72
Mohogawan	2/1	14·00	1·25	..	..	..	..	..	..	53·11
	49/2	15·19	1·36	..	..	..	..	..	..	24·03
Mohokhed	20	15·27	2·59	..	..	..	..	..	..	39·30
TEHSIL AKOT	6/2	26·13	4·66	..	..	..	..	..	..	38·35
Lothkhed	18	6·05	1·48	..	..	..	..	..	..	28·07
	$\frac{18}{1,C,D}+19$	5·09	0·90	16·63	49·89	..	..	..	..	71·27
	$\frac{50}{1}+\frac{50}{2A}$			..	..	..	..	..	..	
Sawargaon	31/2	7·79	1·22	..	..	..	..	..	..	52·90
	7/4	8·42	1·26	..	..	..	..	..	..	32·91
Mahamadabad	23	12·29	1·82	..	..	..	..	..	..	28·18
	$57+\frac{58}{3}$	10·93	1·66	3·76	11·27	..	..	..	..	48·51
Jainpur pimpri	20	11·78	2·04	..	..					43·63
	55/6	12·96	2·24	..	..	..	...	..	..	53·83
Marodi	50	15·56	3·50	..	..	..	..	..	..	40·65
	33/3	11·85	1·35	0·37	1·11	..	..	..	..	30·68

APPENDIX III—TABLE 4—Contd.

CROP COTTON—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey/ Sub-No.	SEED		MANURE		Rent Rs.	Lease value Rs.	Watch Rs.	Imple-ments Rs.	Total money value in R
		Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
TEHSIL BALAPUR										
Pattiamrai	237/2	6·31	0·90	..						23·08
	242/1C	Omitted								
Khandala	65/5	9·85	1·76	..	..	..	..	..	..	37·93
	17/2	8·00	1·43	..	..	..	..	..	..	
Manki	41/4	10·95	1·17	8·12	24·36	..	..	..	..	22·92
	96/2	8·70	1·24	..	..	..	..	..	..	
Nagod			Omitted							48·11
Tulanga	29/1	16·25	2·03	68·9 lb-Oil cake	5·22	..	..	..	..	19·38
	28/2	12·91	1·61							34·22
TEHSIL BASIM										18·46
Chiwara	1/3	14·00	1·85	..	..	..	..	..	..	26·65
	37/1A	14·88	1·45	..	..	..	..	..	..	21·97
Kajalamba	37/3A	20·18	3·02	..	..	..	..	..	..	22·64
	43/2A	22·77	3·41	..	..	..	..	..	..	33·52
Tapowan	13/1	12·76	1·69	..	..	..	..	..	..	13·22
	10/1	12·50	1·65	..	..	..	..	..	..	39·40
Kurha	54	16·50	2·18	..	..	..	..	..	..	64·20
	57/2	11·62	1·54	..	..	..	..	..	..	149·29
Krishna	36/2	14·74	1·84	..	..	..	..	..	..	50·03
	24/1A	16·00	2·00	..	..	..	..	..	..	51·11
TEHSIL MANGRULPIR										
Baldeo	14	20·12	2·16	..						38·74
	19	12·44	1·33	20 lb. Oil cake	1·50	..	..	..	..	41·17
Pardi	19/2A	13·24	1·85							35·84
	48/7	12·31	1·74	..	..	..	..	..	..	76·47
Pimpri	25	20·25	2·22	5·00	15·00	..	..	..	..	65·54
	23/1A	15·79	1·73	..	..	..	..	..	..	28·95
Chondhi	14	12·20	1·33	..	..	..	..	..	..	34·97
	8	14·22	1·52	7·83	23·49	..	..	..	..	68·61
Mendara	65	15·71	1·42	..	..	..	..	..	..	36·21
	3/2	23·65	2·22	..	..	..	..	..	..	86.95

APPENDIX III— TABLE 5

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub. No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	10/1	22·42	8·42	18·00	22·58	..	71·42	68·72	2·70	11·53	11·25	0·28
		11/3	71·53	11·53	16·77	69·22	..	169·05	129·59	39·46	24·78	18·00	6·78
		12	90·98	7·96	14·70	34·01	..	147·65	124·08	23·57	23·97	20·47	3·50
		42	21·44	7·34	30·90	22·93	..	82·61	76·06	6·55	12·53	11·83	0·70
		11	44·67	11·00	15·66	99·16	..	170·49	67·00	103·49	25·49	6·98	18·51
	2	60/2	86·28	10·81	42·52	104·15	..	243·76	215·60	28·16	25·66	21·67	3·99
		6	34·71	8·82	11·22	49·40	..	104·15	100·94	3·21	12·33	11·94	0·39
Redhwa	3	9	40·88	8·04	28·60	10·72	..	88·24	68·36	19·88	13·01	10·38	2·63
	4	84/4	28·20	6·60	22·61	13·91	..	71·32	4·40	66·92	10·65	1·10	9·55
		86	19·38	6·60	15·29	21·18	..	62·45	4·40	58·05	10·08	1·10	8·98
Vairatrajapur	5	49/5	35·68	7·46	11·66	29·38	..	84·18	45·24	38·94	14·04	8·01	6·03
		14/1	47·03	4·32	5·40	16·22	..	72·97	35·68	37·29	11·18	5·94	5·24
	6	23/2	58·54	8·78	23·42	29·27	..	120·01	52·69	67·32	18·18	8·05	10·13
		48/2	87·62	5·71	11·43	34·29	..	139·05	41·90	97·15	21·49	6·55	14·94
Bhendikaji	7			Omitted									
	8			Omitted									
Kaulkhed	9	17/5	115·58	30·48	40·00	41·90	..	227·96	20·53	207·43	27·46	2·78	24·68
	10	6/2	44·78	7·21	15·03	41·08	8·42	116·52	114·72	1·80	11·54	11·35	0·19
		8/3	22·60	13·91	15·94	88·68	..	141·13	141·13	..	13·45	13·45	..

APPENDIX III—TABLE 5—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub. No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL MURTIZAPUR.													
Lodhipur	11	20	9·16	8·73	18·61	38·96	..	75·46	29·95	45·51	8·65	3·20	5·45
		1	13·54	7·67	21·64	22·47	..	65·32	38·63	26·69	8·24	5·10	3·14
	12	24/1	11·10	5·55	48·33	53·03	..	118·01	58·90	59·11	14·17	7·21	6·96
		24/1A	9·90	4·58	16·38	19·81	..	50·67	33·91	16·76	5·91	3·93	1·98
Sultanpur	13	118	29·88	7·60	16·71	61·78	..	115·97	113·95	2·02	16·83	16·53	0·30
		16/1	37·31	11·85	16·30	60·47	..	125·93	117·59	8·34	20·97	19·67	1·30
	14	2	49·65	23·53	14·12	32·94	..	120·24	92·21	28·03	20·69	16·18	4·51
Karli	15	47/1	16·14	8·24	38·64	22·49	..	85·51	39·15	46·36	12·15	5·35	6·80
		80	9·12	7·08	31·90	82·54	..	130·64	98·49	32·15	12·65	7·81	4·84
	16	79	21·18	10·17	22·78	22·92	..	77·05	8·82	68·23	11·84	1·48	10·36
		45	12·66	5·15	18·03	22·04	..	57·88	6·29	51·59	9·49	1·45	8·04
Mohogawan ..	17	39/1	16·00	5·34	21·33	30·22	..	72·89	56·89	16·00	9·65	7·50	2·15
		23/1	13·33	8·00	23·55	22·67	..	67·55	57·33	10·22	9·15	7·67	1·48
	18			No	Jowar	Field							
Mohokhed	19	66/12	31·66	6·66	13·22	24·33	..	75·87	69·77	6·10	13·52	12·83	0·69
		21+25+26	11·99	5·77	10·10	65·96	..	93·82	91·20	2·62	14·17	14·17	0·11
	20	24	11·91	8·03	11·40	75·89	..	107·23	107·23	..	10·29	10·29	..

APPENDIX III—TABLE 5—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21	24/2	18·77	14·70	21·22	13·91		68·60	38·40	30·20	10·83	6·53	4·30
	22	56/1A	22·60	8·94	13·41	88·36		133·31	131·57	1·74	19·49	19·22	0·27
Sawargaon	23	51	10·78	6·47	10·79	11·88		39·92	4·89	35·03	5·48	0·99	4·49
		66/1	102·50	2·50	15·00	32·50		152·50	37·50	115·00	26·09	11·25	14·84
		47/1	9·35	6·98	26·85	62·30		105·48	22·68	82·80	11·80	1·93	9·87
	24	41/1+2	33·20	24·94	25·34	44·71		128·19	67·89	60·30	16·84	9·20	7·64
Mahamadabad	25	77/3	41·42	10·28	22·86	83·99		158·55	131·76	26·79	28·71	24·07	4·64
		75/1	45·90	13·57	15·81	40·00		115·28	91·88	23·40	17·94	14·35	3·59
	26	44/1	30·00	8·00	119·00	25·00		182·00	175·00	7·00	20·89	19·93	0·96
		28/2	8·14	5·64	18·36	18·82		50·96	38·32	12·65	7·72	5·58	2·14
Jainpurpimpri	27	90/2	46·26	6·53	15·23	27·76		95·78	65·85	29·93	16·95	11·96	4·99
		44/2	10·74	7·16	36·92	26·07		80·89	60·79	20·10	14·84	11·13	3·71
	28	87/1	36·80	6·67	26·14	9·83		79·44	62·87	16·57	15·96	12·93	3·03
Marodi	29			No	Jowar	Field							
	30	58/2C	63·45	17·24	32·41	35·86	22·76	171·72	123·44	48·28	23·32	16·88	6·43

APPENDIX III—TABLE 5—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BALAPUR													
Pattiamrai	31			No	Jowar	Field							
	32	59/3	9·09	10·91	19·63	18·91	..	58·54	49·82	8·72	9·18	7·58	1·60
Khandala	33	124/2	37·23	4·62	11·54	24·61	..	78·00	75·31	2·69	9·23	8·85	0·38
	34	28/2	25·62	3·75	11·88	18·74	..	59·99	56·87	3·12	7·85	7·41	0·44
		28/1	10·61	2·50	11·88	19·37	..	44·36	39·99	4·37	6·29	5·63	0·66
Manki	35			No	Jowar	Field							
	36			No	Jowar	Field							
Nagod	37	3/2	40·00	4·92	19·08	5·54	..	69·54	62·77	6·77	10·41	9·64	0·77
		35	42·34	5·78	21·48	31·74	..	101·34	100·38	0·96	13·66	13·53	0·13
		$\frac{47}{2}+\frac{48}{1}$	56·10	6·01	18·64	3·91	..	84·66	83·46	1·20	10·92	10·92	
		10+16	26·13	7·90	17·85	15·16	..	67·64	66·79	0·25	7·08	7·05	0·03
	38	$\frac{57}{2}+\frac{58}{1+2}$	50·38	6·17	16·84	11·93	..	85·32	72·94	12·38	12·17	10·55	1·62
		2/3	91·50	7·50	12·50	58·00	..	169·50	136·00	33·50	22·67	18·41	4·26
		12	21·53	4·76	15·15	21·28	..	62·72	53·10	9·62	7·13	5·97	1·16
Tulanga	39	46/1	26·01	11·38	31·54	53·13	..	122·06	9·10	112·96	14·99	1·30	13·69
	40	29/2	69·55	20·88	20·00	56·53	..	166·96	41·45	125·51	22·07	7·58	14·49

APPENDIX III—TABLE 5—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub. No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Basim													
Chiwara	41	42/2	18·94	11·05	33·69	26·84	..	90·52	41·05	49·47	11·85	5·31	6·54
		66	8·44	4·32	37·84	26·13	..	76·73	52·89	23·84	11·59	8·36	3·23
		10/1	14·78	18·52	18·52	43·78	..	92·60	63·14	29·46	10·66	7·06	3·60
		5/1	54·51	13·04	26·08	24·30	..	117·93	72·30	45·63	16·28	11·03	5·25
		35/3	29·51	6·56	9·84	73·12	..	119·03	87·22	31·81	23·56	19·86	3·70
	42	53/3	66·68	9·00	10·00	56·00	..	141·68	57·86	83·82	16·15	6·47	9·68
		53/7	34·92	13·55	32·00	73·46	..	153·93	20·37	133·56	21·08	3·45	17·63
		54/1	100·00	8·57	46·67	126·67	..	301·91	76·20	225·71	37·39	9·13	28·26
		54/5	33·60	16·00	16·80	33·60	..	100·00	32·00	68·00	14·36	5·80	8·56
		20/1	46·53	12·20	36·61	52·89	..	148·23	34·88	113·35	20·80	6·71	14·09
Kajalamba	43	101/1	20·62	3·12	13·75	10·32	..	47·81	0·94	46·87	5·34	0·18	5·16
		108/1A	10·50	3·50	16·00	1·50	..	31·50	2·00	29·50	2·92	0·19	2·73
		92/4	80·00	12·31	58·46	18·46	..	169·23	16·41	152·82	17·90	2·56	15·34
		93/2	16·20	4·50	14·00	13·50	..	48·20	2·00	46·20	5·61	0·38	5·23
		108/2	16·58	4·57	16·00	23·14	..	60·29	1·33	58·96	7·49	0·14	7·35
	44	17/1	8·00	10·66	12·00	14·66	..	45·32	37·99	7·33	8·83	8·00	0·83
		32/3	10·67	8·00	11·99	17·23	..	47·99	37·99	10·00	8·99	8·04	0·95
Tapowan	45	11/3B	14·59	3·00	8·00	152·00	..	177·59	54·00	123·59	24·43	5·94	18·49
		13	12·36	5·08	17·46	41·81	..	76·71	38·09	38·62	10·69	5·37	5·32
	46	28	14·67	13·33	47·34	26·67	..	102·01	..	102·01	12·56	..	12·56
		56/1	6·67	9·33	8·00	15·33	..	39·33	7·33	32·00	5·08	1·17	3·91
Kurha	47	23/2	41·00	11·00	32·50	38·50	..	123·00	96·75	28·25	14·32	11·01	3·31
		26	22·22	8·00	16·54	48·00	..	94·76	83·11	11·65	10·92	9·60	1·32
	48	2/2	26·40	9·50	13·06	32·32	..	81·28	49·29	31·99	9·66	6·01	3·65
Krishna	49	70	34·62	5·00	19·00	24·25	..	82·87	15·37	67·50	11·28	2·44	8·84
		72/1	25·00	2·50	..	20·84	..	48·34	10·17	38·17	6·34	1·57	4·77
		6	52·00	8·00	11·84	31·67	..	133·51	81·59	51·92	16·66	9·84	6·82
		7	50·70	12·00	12·00	15·58	..	90·28	28·03	62·25	10·79	3·41	7·29
	50	56	89·78	8·00	43·50	30·25	..	171·53	..	171·53	22·10	..	22.10

APPENDIX III—TABLE 5—Contd.

CROP JOWAR.—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub. No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Mangrulpir													
Baldeo	51	32/2	32·00	10·66	20·01	112·18	..	174·85	134·35	40·50	26·30	20·81	5·49
		10	28·00	14·40	26·40	87·60	..	156·40	124·00	32·40	16·21	11·80	4·41
		37/1	24·13	7·00	20·28	33·13	..	84·54	54·69	29·85	15·34	11·17	4·17
	52	17/2	2·81	9·82	13·68	19·64	..	45·95	39·64	6·31	6·26	5·45	0·81
		13/1	61·52	10·94	11·96	24·96	..	109·38	102·54	6·84	16·22	15·34	0·88
		13/4	23·53	15·06	14·59	32·94	..	86·12	76·71	9·41	12·09	10·88	1·21
Pardi	53	43/1	86·40	12·80	35·20	115·20	..	249·60	211·20	38·40	30·11	25·80	4·31
		61/3	57·13	12·93	15·73	39·66	..	125·45	114·09	11·36	15·08	13·63	1·45
		113/1	106·67	8·00	37·33	32·67	..	184·67	159·34	25·33	24·13	21·13	3·00
	54	48/4A	24·52	12·31	16·21	44·94	..	97·98	88·03	9·95	10·08	8·76	1·32
Pimpri Kd	55	93	20·75	11·88	13·12	14·00	..	59·75	8·62	51·13	9·39	1·63	7·76
		97/1	26·78	7·28	22·14	38·27	..	94·47	15·14	79·33	15·94	3·43	12·51
	56	52	23·00	6·51	15·19	35·55	..	80·25	29·17	51·08	18·52	18·93	13·59
Chondh	57	16	43·17	8·75	11·23	36·79	..	100·04	90·96	9·08	12·79	12·14	0·65
		26	19·39	10·86	38·64	21·43	..	90·32	89·01	1·31	11·74	11·60	0·14
		17	46·40	11·20	46·55	71·05	..	175·20	171·55	3·65	20·57	20·07	0·50
		12	43·64	10·18	21·18	53·55	..	128·55	123·37	5·18	15·95	15·19	0·76
		24	69·20	5·60	45·30	59·85	..	179·95	176·05	3·90	19·54	19·04	0·50
	58	20/1	17·50	8·00	50·00	45·50	..	121·00	75·50	45·50	17·19	12·72	4·47
		20/1A	16·66	7·61	28·57	56·57	..	109·49	64·27	45·22	17·08	11·84	5·24
Mendara	59	84	6·00	3·20	10·20	47·20	..	66·60	62·60	4·00	11·23	10·74	0·49
	60	42/1	12·73	6·67	..	68·16	..	87·56	84·89	2·67	12·06	11·78	0·28
		134/2	51·41	8·00	8·00	96·98	..	164·39	150·73	13·66	21·23	19·50	1·73

APPENDIX III—TABLE 5—contd.

CROP JOWAR.—*Field Sample*

Village	Survey/ Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akola												
Masa	37	37·31	7·52	19·73	78·52	..	143·08	115·57	27·51	20·65	17·05	3·60
	47	22·62	5·66	30·90	68·08	..	127·26	63·22	64·04	16·76	8·88	7·88
Redhawa	80/2	12·95	7·77	20·56	13·28	..	54·56	21·21	33·35	8·13	3·47	4·66
	82	43·20	11·20	34·54	21·60	..	110·54	79·07	31·47	15·01	10·71	4·30
Vairatrajaur	8	33·75	9·00	24·50	24·00	3·00	94·25	19·50	74·75	14·30	2·94	11·36
	30/1+2	134·09	6·85	18·85	26·85	..	186·64	112·67	73·97	22·18	11·74	10·44
Bhendikaji	Omitted											
Kaulkhed	4	57·06	11·42	37·71	54·85	9·14	170·18	150·91	19·27	20·09	18·00	2·09
	11	105·10	5·66	13·21	56·24	..	180·21	109·83	70·38	21·09	13·43	7·66
Tehsil Murtizapur												
Lodhipur	17/5	56·26	22·06	18·76	26·75	..	123·83	104·26	19·57	14·87	11·98	2·89
	10/1	38·44	8·94	25·03	19·22	..	91·63	32·62	59·01	11·60	4·69	6·91
Sultanpur	8	15·49	8·85	17·15	34·01	..	75·50	35·49	40·01	6·27	6·18	0·09
	4/1	13·75	10·50	19·50	37·50	..	81·25	63·75	17·50	12·39	9·71	2·68
Karli	28	22·25	11·55	24·51	47·51	..	105·82	69·11	36·71	24·61	19·10	5·51
	21	24·66	14·77	23·99	32·66	..	96·08	57·09	38·99	16·58	10·86	5·72
Mohogawan	17	28·29	6·86	28·43	31·64	..	95·22	91·79	3·43	14·49	14·09	0·40
	23/2	39·60	9·60	32·00	58·40	..	139·60	54·80	84·80	18·41	7·32	11·09
Mohokhed	113/2	12·89	1·56	14·55	37·77	..	66·77	59·11	7·66	9·81	8·62	1·19
	23	19·25	7·50	8·50	30·25	..	65·50	63·50	2·00	10·75	8·75	2·00

CROP JOWAR.—*Field Sample*

Village	Survey/ sub-No.	MAN LABOUR IN HOURS								MONEY IN VALUE RUPEES		
		Pre-Sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOT												
Lothkhed	65+4/1	19·18	7·99	2·14	35·13	..	64·44	55·02	9·42	10·93	9·57	1·36
	53+62/2+54/1	13·66	10·04	11·64	42·51	..	77·85	46·47	31·38	11·25	6·73	4·52
Sawargaon	4/1	23·70	6·40	10·64	15·47	..	56·21	31·52	24·69	6·58	3·26	3·32
	39/2	61·93	14·19	16·77	51·61	..	144·50	123·86	20·64	27·57	24·67	2·90
Mahamadabad	85/2+3	44·99	10·91	31·36	19·09	..	106·35	75·44	30·91	16·44	12·15	4·29
	43/1	48·78	7·80	16·59	20·48	..	93·65	56·58	37·07	13·01	7·93	5·08
Jainpurpimpri	33	10·38	7·22	9·32	5·57	..	32·49	32·29	0·20	5·72	5·69	0·03
	64	52·52	10·00	18·28	19·70	..	100·10	66·40	33·70	16·80	11·30	5·50
Marodi	24/1	39·58	4·95	12·79	10·31	..	67·63	40·82	26·81	9·29	5·65	3·64
	34/3	46·67	6·67	42·22	25·56	..	121·12	70·28	50·84	16·20	9·44	6·76
TEHSIL BALAPUR												
Pattiamrai	366/3	11·01	4·40	18·17	14·50	..	48·08	37·25	10·83	8·96	6·72	2·24
	354/1A	18·25	3·69	14·97	34·46	..	71·37	54·56	16·81	16·64	12·77	3·87
Khandala	26/4	23·75	5·00	12·75	32·50	..	74·00	52·75	21·25	9·20	6·38	2·82
	133	8·41	5·45	5·23	20·45	..	39·54	23·86	15·68	6·03	3·81	2·22
Manki	25	16·57	7·50	12·00	27·66	..	63·73	56·52	7·21	6·79	6·05	0·74
	69/2	40·00	5·00	10·00	34·00	..	89·00	3·00	86·00	9·93	1·00	8·93
Nagod	8/1	51·36	5·41	35·32	24·15	..	116·24	66·76	9·19	8·17	7·01	1·16
	26/2	52·60	8·10	19·42	46·70	..	126·82	99·60	16·33	12·69	11·07	1·62
Tulanga	41	53·83	1·21	4·64	16·27	..	75·95	66·76	9·19	8·17	7·01	1·16
	47/1	57·15	7·35	25·31	26·12	..	115·93	99·60	16·33	12·69	11·07	1·62

APPENDIX III—TABLE 5—Contd.

CROP JOWAR.—*Field Sample.*

Village	Survey/ sub No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money-equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL BASIM												
Chiwara	101	22·00	8·00	18·00	64·80	..	110·80	48·00	62·80	14·08	6·27	7·81
	54/7	16·00	10·67	21·33	74·36	..	122·36	..	122·36	18·63	..	18·63
Kajalamba	92/6	5·72	10·16	15·24	8·26	..	39·38	15·24	24·14	2·83	1·35	1·48
	40/4	34·19	13·67	29·41	22·56	..	99·83	70·43	29·40	11·86	8·63	3·23
Tapowan	3	11·87	5·57	15·54	13·06	..	46·04	18·63	27·41	6·18	2·47	3·71
	2	15·11	9·55	8·67	12·00	..	45·33	12·61	32·72	5·93	1·81	4·12
Kurha	39	8·48	7·83	29·62	21·58	..	67·51	30·06	37·45	8·27	3·87	4·40
	49/1	26·61	12·35	37·92	40·87	..	117·75	56·74	67·01	15·39	7·79	7·60
Krishna	15	63·90	9·00	17·80	44·40	..	135·10	30·20	104·90	18·63	4·77	13·86
	60/12	35·30	10·59	19·41	59·99	..	125·29	74·70	50·59	15·47	8·38	7·09
TEHSIL MANGRULPIR												
Bladeo	16	42·57	10·66	21·33	32·00	..	106·56	98·56	8·80	32·39	26·12	6·27
	31	43·57	7·12	9·78	36·44	..	96·91	44·91	52·00	14·34	6·87	7·47
Pardi	100/1	85·00	8·00	32·80	59·00	..	184·80	178·00	6·80	17·22	16·44	0·78
	80/1A	29·33	13·34	31·66	64·66	..	138·99	2·00	136·99	18·86	9·89	8·97
Pimpri Kd	39	35·90	7·20	14·40	11·40	..	68·90	56·41	12·49	9·88	7·94	1·94
	6/2	28·50	6·00	16·50	30·50	..	81·50	7·75	73·75	14·22	6·82	7·40
Chondhi	15/4	42·00	16·00	37·00	57·00	7·00	159·00	72·00	87·00	22·16	12·42	9·74
	24/1	57·00	8·62	25·87	37·36	1·68	130·53	115·92	14·61	16·15	14·11	2·04
Mendara	34/2	14·00	4·00	9·60	24·90	..	52·50	44·70	7·80	7·77	6·82	0·95
	42/2	47·80	2·40	10·80	27·00	..	88·00	85·60	2·04	11·79	11·50	0·29

APPENDIX III—TABLE 6

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	10/1	5·89	0·89	39·75	..	..	46·62	46·62	..	2·14	2·14	..
		11/3	9·17	9·43	15·59	28·95	..	63·14	63·14	..	4·54	4·54	..
		12	11·63	0·92	29·87	19·61	..	62·03	42·42	19·61	2·73	2·61	0·12
		42	43·34	1·27	11·00	14·67	..	70·28	70·28	..	7·46	7·46	..
		11	11·33	1·33	16·50	56·66	..	85·82	85·82	..	9·45	9·45	..
	2	60/2	12·13	..	..	..	..	12·13	12·13	..	0·90	0·90	..
		6	21·94	..	5·44	30·51	..	57·89	57·89	..	3·46	3·46	..
Redhawa	3	9	22·23	2·01	36·19	14·07	..	74·50	70·26	4·24	6·52	6·12	0·40
	4	84/4	14·36	..	..	31·30	..	45·66	..	45·66	4·29	..	4·29
		86	17·19	..	43·53	21·18	..	81·90	14·12	67·78	7·38	1·06	6·32
Vairatrajapur	5	49/5	4·20	..	..	23·09	..	27·29	27·29	..	3·14	3·14	..
		14/1	22·70	..	..	3·24	..	25·94	25·94	..	1·82	1·82	..
	6	23/2	29·27	..	..	11·71	..	40·98	38·05	2·93	3·13	2·95	0·18
		48/2	15·24	..	34·29	..	..	49·53	45·72	3·81	3·45	3·21	0·24
Bhendikaji	7				Omitted								
	8				Omitted								
Kaulkhed	9	17/5	35·88	..	28·57	..	..	64·45	21·76	42·69	3·91	1·32	2·59
	10	6/2	..	..	19·24	5·41	..	24·65	24·65	..	1·34	1·34	..
		8/3	..	..	34·78	9·27	..	44·05	44·05	..	2·17	2·17	..

APPENDIX III—TABLE 6—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Murtizapur													
Lodhipur	11	20	8·72	2·91	6·96	8·72	..	27·31	15·70	11·61	2·31	1·28	1·03
		1	12·49	2·74	48·77	14·38	..	78·38	43·76	35·63	4·09	2·88	1·21
	12	24/1	28·44	..	29·50	22·59	..	80·53	76·77	3·76	4·93	4·80	0·13
		24/1A	13·72	2·29	..	2·29	..	18·30	18·30	..	1·33	1·33	..
Sultanpur	13	118	10·63	..	78·74	4·56	..	93·93	93·93	..	6·26	6·26	..
		16/1	14·01	..	66·54	22·63	..	103·18	98·33	4·85	8·77	8·01	0·76
	14	2	11·41	..	47·85	14·12	..	73·38	73·38	..	5·48	5·48	..
Karli	15	47/1	10·30	..	20·60	12·02	..	42·92	42·92	..	3·28	3·28	..
		80	..	..		..	..	..	..	..	..	..	..
	16	79	..	2·85	7·59	12·21	..	22·65	14·65	8·00	1·97	1·22	0·75
		45	9·28	1·72	..	23·05	..	34·05	15·32	17·73	4·50	2·40	1·65
Mohogawan	17	39/1	6·67	1·33	20·67	26·00	..	54·67	48·00	6·67	6·68	6·00	0·68
		23/1	8·00	2·00	19·34	26·00	..	55·34	48·67	6·67	5·36	4·68	0·68
	18				No	Jowar	field						
Mohokhed	19	66/12	32·00	1·33	17·78	16·00	..	67·11	67·11	..	7·50	7·50	..
		21+25+26	7·24	1·25	18·61	21·19	..	48·29	46·79	1·50	4·95	4·80	0·15
	20	24	7·29	..	17·09	36·41	..	60·79	69·79	..	6·56	6·56	..

APPENDIX III—TABLE 6—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	Woman labour in hours								Money value in rupees		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21	24/2	30·20	..	16·33	..	..	46·53	41·63	4·90	2·95	2·60	0·35
	22	56/1A	22·36	..	9·44	21·49	..	53·29	53·29	..	7·20	7·20	..
Sawargaon	23	51	26·14	..	41·66	2·38	..	70·18	67·80	2·38	6·88	6·55	0·33
		66/1	50·00	..	112·50	..	..	162·50	162·50	..	13·44	13·44	..
		47/1	28·66	..	50·09	15·70	..	94·45	94·45	..	8·07	8·07	..
	24	41/1+2	23·04	..	73·98	14·63	..	111·65	111·65	..	8·75	8·75	..
Mahmadabad	25	77/3	92·04	..	48·00	20·86	..	160·90	160·90	..	10·62	10·62	..
		75/1	22·44	..	67·52	20·00	..	109·96	109·96	..	10·62	10·62	..
	26	44/1	..	..	75·00	..	..	75·00	65·00	10·00	5·98	5·44	0·54
		28/2	52·89	..	32·63	6·28	..	91·80	78·63	13·17	5·92	4·90	1·02
Jainpurpimpri	27	90/2	10·88	..	..	5·44	..	16·32	10·88	5·44	1·25	0·82	0·43
		44/2	51·14	..	18·11	5·97	..	75·22	75·22	..	5·59	5·59	..
	28	87/1	24·00	..	42·93	..	..	66·93	58·40	8·53	10·90	10·25	0·65
Marodi	29				No	Jowar	field						
	30	58/2C	10·34	..	48·27	..	..	58·61	58·61	..	5·39	5·39	..

APPENDIX III—TABLE 6—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	Woman labour in hours								Money value in rupees		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Balapur													
Pattiamrai	31			No	Jowar	field							
	32	59/3	21·82	..	26·82	17·82	..	65·82	65·82	..	4·09	4·09	..
Khandala	33	124/2	9·23	..	38·08	14·61	..	61·92	61·92	..	5·09	5·09	..
	34	28/2	65·00	..	15·00	8·12	..	88·12	88·12	..	8·39	8·39	..
		28/1	23·08	..	..	9·38	..	32·46	32·46	..	3.33	3·33	..
Manki	35			No	Jowar	field							
	36			No	Jowar	field							
Nagod	37	3/2	18·46	..	56·00	33·23	..	107·69	74·46	33·23	7·84	3·15	4·19
		35	13·77	..	62·31	6·20	..	82·28	82·28	..	4·45	4·45	..
		47/2+48/1	16·11	..	52·63	..	..	68·74	68·74	..	3·36	3·36	..
		10+16	18·32	..	45·96	18·67	..	82·95	82·95	..	5·61	5·61	..
	38	57/2+58/1+2	32·33	..	101·58	8·84	..	142·75	142·75	..	12·89	12·89	..
		2/3	30·00	..	77·50	16·00	..	123·50	123·50	..	7·03	7·03	..
		12	20·85	..	37·45	15·49	..	73·79	73·79	..	6·30	6·30	..
Tulanga	39	46/1	13·00	..	3·56	28·66	..	45·22	27·33	47·89	2·55	1·54	1·01
	40	29/2	11·36	..	..	..	..	11·36	11·36	..	0·68	0·68	..

APPENDIX III—TABLE 6—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial of No. holding	Survey/ Sub. No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BASIM													
Chiwara	41	42/2	47·37	..	..	15·79	..	63·16	63·16	..	4·60	4·60	..
		66	14·42	10·09	..	51·00	..	75·51	66·86	8·65	7·72	7·08	0·64
		10/1	..	4·63	40·42	37·89	..	82·94	82·94	..	6·13	6·13	..
		5/1	71·11	3·26	..	..	..	74·37	74·37	..	6·82	6·82	..
		35/3	..	..	..	40·99	..	40·99	39·35	1·64	5·10	4·92	0·18
	42	53/3	13·97	1·50	..	32·00	..	47·47	45·97	1·50	4·75	4·64	0·11
		53/7	14·55	8·73	..	29·09	..	52·37	43·64	8·73	5·65	5·00	0·65
		54/1	20·00	2·86	11·43	22·86	..	57·15	45·72	11·43	5·28	4·74	0·54
		54/5	19·20	9·60	..	..	..	28·80	28·80	..	3·90	3·90	..
		20/1	14·23	..	..	36·61	..	50·84	50·84	..	5·46	5·46	..
Kajalamba	43	101/1	11·25	..	5·00	11·25	..	27·50	14·06	13·44	1·98	0·78	1·20
		108/1A	12·00	1·75	6·00	5·50	..	25·25	12·75	12·50	1·48	0·59	0·89
		92/4	61·54	12·31	24·61	69·74	..	168·20	38·97	129·23	12·95	2·56	10·39
		93/2	17·40	4·50	6·00	12·00	..	39·90	15·80	24·10	2·61	0·77	1·84
		108/2	8·40	2·28	28·57	26·00	..	65·25	16·97	48·28	4·67	1·39	3·28
	44	17/1	48·00	2·67	8·67	6·67	..	66·01	66·01	..	3·53	3·53	..
		32/3	40·00	2·00	37·33	13·33	..	92·66	92·66	..	4·34	4·34	..
Tapowan	45	11/3B	..	2·82	8·00	..	..	10·82	..	10·82	0·66	..	0·66
		13	8·31	2·54	48·36	10·91	..	70·12	65·76	4·36	3·76	3·49	0·27
	46	28	10·00	..	..	12·66	..	22·66	3·33	19·33	1·43	0·21	1·22
		56/1	..	..	..	2·00	..	2·00	..	2·00	0·13	..	0·13
Kurha	47	23/2	51·00	1·50	38·50	16·75	..	107·75	107·75	..	6·84	6·84	..
		26	53·43	0·80	30·80	16·93	..	101·96	100·63	1·33	6·20	6·13	0·07
	48	2/2	41·98	2·50	19·60	17·66	..	81·74	72·14	9·60	9·18	8·25	0·93
Krishna	49	70	..	1·25	27·00	12·50	..	40·75	40·75	..	2·74	2·74	..
		72/1	13·00	0·83	34·34	9·50	..	57·67	50·01	7·66	3·76	3·72	0·04
		6	..	1·00	8·00	16·16	..	25·16	23·83	1·33	2·19	2·07	0·12
		7	..	1·50	44·50	16·25	..	62·25	60·50	1·75	4·23	4·06	0·17
	50	56	81·27	2·00	31·25	18·00	..	132·52	1·50	131·02	7·04	0·12	6·92

APPENDIX III—TABLE 6—Contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	Woman labour in hours								Money value in rupees		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Mangrulpir													
Baldeo	51	32/2	14·34	..	33·00	48·01	..	95·35	89·02	6·33	8·64	8·12	0·52
		10	23·20	..	..	19·20	..	42·40	39·20	3·20	3·55	4·08	0·35
		37/1	..	1·00	27·84	22·85	..	51·69	47·41	4·28	4·43	4·08	0·35
	52	17/2	28·06	1·75	42·10	8·42	..	80·33	80·33	..	5·98	5·98	..
		13/1	25·64	2·73	41·02	13·67	..	83·06	83·06	..	6·23	6·23	..
		13/4	28·24	3·76	56·47	18·82	..	107·29	107·29	..	8·14	8·14	..
Pardi	53	43/1	..	3·20	..	48·00	..	51·20	48·00	3·20	2·18	2·00	0·18
		61/3	25·16	..	20·96	20·96	..	67·08	67·08	..	4·33	4·33	..
		113/1	48·00	2·00	48·00	16·00	..	114·00	112·00	2·00	5·20	5·09	0·11
	54	48/4A	1·85	..	19·70	30·27	..	51·82	42·27	9·55	3·44	2·92	0·52
Pimpri Kd.	55	93	25·50	2·62	..	10·62	..	38·74	36·12	2·62	3·07	2·85	0·22
		97/1	17·94	0·71	..	5·71	..	24·36	22·07	2·29	1·56	1·39	0·17
	56	52	1·33	2·17	2·17	9·52	..	15·19	9·28	5·91	1·83	1·27	0·56
Chondhi	57	16	14·58	..	125·59	36·75	..	176·92	176·17	0·75	10·17	10·14	0·03
		26	18·18	..	20·17	27·92	..	66·27	66·27	..	4·67	4·67	..
		17	15·00	..	49·00	37·80	..	101·80	101·80	..	7·64	7·64	..
		12	..	..	12·73	17·82	..	30·55	30·55	..	3·84	3·84	..
		24	4·00	..	46·00	29·20	..	79·20	79·20	..	4·99	4·99	..
	58	20/1	..	6·00	92·50	35·00	..	133·50	133·50	..	9·15	9·15	..
		20/1A	..	5·71	14·28	39·99	..	59·98	59·98	..	7·28	7·28	..
Mendara	59	84	8·00	4·80	64·60	14·40	..	91·80	91·80	..	8·45	8·45	..
	60	42/1	..	..	5·33	8·34	..	13·67	13·67	..	1·08	1·08	..
		134/2	..	8·00	12·00	61·33	..	81·33	81·33	..	7·16	7·16	..

APPENDIX III—TABLE 6—Contd.

CROP JOWAR—*Field Sample*

Village	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOLA												
Masa	37	12·08	1·88	49·39	23·35	..	86·70	86·70	..	5·26	5·26	..
	47	66·26	1·41	..	52·52	..	165·64	165·64	..	11·73	11·73	..
Redhawa	80/2	22·67	1·94	45·45	7·78	..	32·39	32·39	..	3·52	3·52	..
	82	44·80	1·87	12·60	14·00	..	73·27	71·87	1·40	6·63	6·48	0·15
Vairatrajapur	8	39·75	..	4·50	4·50	..	48·75	43·50	5·25	4·94	4·62	0·32
Bhendikaji	30/1+2	56·55	..	33·41	8·57	..	98·53	89·96	8·57	6·53	6·00	0·53
Kaulkhed	4	..	..	22·28	17·14	..	39·42	39·42	..	2·50	2·50	..
	11	..	..	6·79	13·59	..	20·38	20·38	..	1·48	1·48	..
TEHSIL MURTIZAPUR												
Lodhipur	17/5	13·24	..	..	14·89	..	28·13	28·13	..	2·37	2·37	..
	10/1	16·09	..	3·35	12·07	..	31·51	25·48	6·03	3·18	2·83	0·35
Sultanpur	8	13·82	2·21	19·36	13·27	..	48·66	48·66	..	3·95	3·95	..
	4/1	8·50	..	42·00	10·50	..	61·00	61·00	..	4·14	4·14	..
Karli	28	33·80	..	28·17	71·13	..	83·10	79·91	3·19	6·82	6·57	0·25
	21	36·00	..	25·66	27·43	..	89·09	81·54	7·55	7·32	6·66	0·66
Mohogawan	17	15·43	1·71	52·72	15·13	..	85·29	85·29	..	6·32	6·32	..
	23/2	36·00	2·40	22·80	24·00	..	85·20	28·80	56·40	7·98	3·10	4·88
Mohokh d	113/2	53.32	1·56	44·00	21·22	..	120·10	119·00	1·00	10·55	10·45	0·10
	23	12·00	1·50	49·50	9·00	..	72·00	72·00	..	7·49	7·49	..

APPENDIX III—TABLE 6—Contd.

CROP JOWAR—*Field Samples.*

Village	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akot												
Lothkhed	65+4/1	12·03	..	20·56	9·14	..	41·73	41·73	..	3·65	3·65	..
	53+62/2+ 54/1	30·15	..	4·83	12·18	..	47·16	47·16	..	4·82	4·82	..
Sawargaon	4/1	20·79	6·98	6·98	4·00	..	31·77	31·77	..	4·78	4·78	..
	39/2	19·35	..	15·48		..	34·83	34·83	..	3·23	3·23	..
Mahmadabad	85/2+3	133·62	..	54·54	35·45	..	223·61	179·98	43·63	17·66	13·06	4·60
	43/1	78·05	..	31·22	7·80	..	117·07	109·27	7·80	6·61	5·61	1·00
Jainpurpimpri	33	19·76	..	25·87	4·98	..	50·61	50·61	..	3·34	3·34	..
	64	99·96	..	12·99	..	..	112·95	112·95	..	7·85	7·85	..
Marodi	24/1			12·36	..	..	12·36	10·30	2·06	0·97	0·77	0·20
	34/3	8·33	..	..	..	..	8·33	6·94	1·39	0·60	0·52	0·08
Tehsil Balapur												
Pattiamrai	336/3	9·18	..	11·01	3·30	..	23·49	23·49	..	1·51	1·51	..
	354/1A	12·31		10·26	11·08	..	33·65	33·65	..	3·03	3·03	..
Khandala	26/4	31·25	5·00	35·00	30·00	..	101·25	101·25	..	6·83	6·83	..
	133	34·50	..	10·00	8·18	..	52·68	52·68	..	3·08	3·08	..
Manki	25	21·72	..	25·66	..	..	57·38	57·38	..	3·08	3·08	..
	69/2	20·00	10·00	10·00	23·00	..	53·00	20·00	43·00	4·32	1·25	3·07
Nagod	8/1	22·52	..	105·96	..	..	128·48	105·96	22·52	6·47	4·73	1·74
	26/2	21·38	42·08	42·08	3·70	..	67·16	67·16	..	3·41	3·41	..
Tulsaga	41	31·82	..	17·98	..	..	49·80	49·80	..	2·17	2·17	..
	47/1	24·49	..	17·96	..	..	42·45	42·45	..	2·25	2·25	..

APPENDIX III—TABLE 6—contd.

CROP JOWAR—*Field Sample*

Village	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara :	101	45·33	2·00	..	35·66	..	82·99	82·99	..	7·37	7·37	..
	54/7	23·70	2·67	..	30·77	..	57·14	57·14	..	5·50	5·50	..
Kajalamba	92/6	22·86	5·08	25·40	7·62	..	60·96	52·07	8·89	3·23	2·58	0·65
	40/4	15·41	..	26·67	14·35	..	57·43	41·71	15·72	3·75	2·66	1·09
Tapowan	3	13·76	2·02	24·93	23·74	...	64·45	51·16	13·29	4·50	3·61	0·89
	2	..	2·17	23·06	28·67	..	53·90	51·16	9·17	3·54	2·78	0·65
Kurha	39	14·54	..	13·04	19·24	..	46·84	27·06	19·78	3·82	1·99	1·83
	49/1	28·22	..	..	7·94	..	36·16	36·16	..	2·21	2·21	..
Krishna	15	14·40	..	19·20	17·00	..	50·60	46·60	4·00	3·38	2·94	0·44
	60/12	22·06	35·29	35·29	17·65	..	75·00	75·00	..	8·38	8·38	..
Tehsil Mangrulpir												
Baldeo	16	30·06	2·67	40·00	32·00	..	104·73	104·73	..	8·12	8·12	..
	31	6·67	1·78	41·66	17·78	..	67·89	67·89	..	5·61	5·61	..
Pardi	100/1	..	1·80	24·00	28·40	..	54·20	53·00	1·20	2·65	2·55	0·10
	80/1A	30·00	..	..	32·00	...	62·00	62·00	..	5·92	5·92	..
Pimpri kd	39	50·92	1·20	4·20	5·00	..	61·32	61·32	..	4·99	4·99	..
	6/2	40·50	..	15·00	..	..	55·50	51·50	4·00	3·90	3·57	0·33
Chondhi	15/4	52·40	4·00	60·00	52·50	..	168·90	168·90	..	18·21	18·21	..
	24/1	..	8·62	134·12	33·53	..	176·27	176·27	..	11·76	11·76	..
Mendara	34/2	26·70	4·80	38·40	13·00	..	82·90	77·70	5·20	6·60	6·06	0·54
	42/2	3·20	2·40	27·20	19·80	..	52·60	149·00	3·60	5·42	4·64	0·78

APPENDIX III—TABLE 7

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	10/1	15·70	3·93	8·10	6·87	..	34·60	..	34·60	12·03	..	
		11/3	49·78	9·43	7·86	10·79	..	77·86	..	77·86	27·07	..	
		12	47·74	5·52	6·31	8·12	..	67·51	..	67·51	23·47	..	
		42	13·23	4·66	13·54	7·06	..	38·49	..	38·49	13·38	..	
		11	36·00	8·00	8·17	6·67	..	58·84	..	58·84	20·46	..	
	2	60/2	59·32	6·49	12·25	35·32	..	113·38	..	113·38	39·42	..	39·42
		6	36·04	5·86	5·28	12·37	..	59·55	..	59·55	20·71	..	20·71
Redhawa	3	9	24·57	6·03	15·30	2·23	..	48·13	..	48·13	16·73	..	
	4	84/4	25·64	4·40	22·61	6·96	..	59·61	2·20	57·41	21·17	1·21	19·96
		86	17·19	4·40	7·65	7·06	..	36·30	2·20	34·10	13·07	1·21	11·86
Vairatrajapur..	5	49/5	14·69	5·59	5·83	8·40	..	34·51	3·73	30·78	12·10	1·40	10·70
		14/1	15·41	2·16	2·70	1·62	..	21·89	..	21·89	7·61	..	7·61
	6	23/2	40·97	7·80	23·41	11·71	..	83·89	17·56	66·33	32·57	9·51	23·06
		48/2	38·10	3·81	11·43	..	..	53·34	11·43	41·91	20·76	6·19	14·57
Bhendikaji	7			Omitted									
	8			Omitted									
Kaulkhed	9	17/5	46·76	15·24	11·43	11·43	..	84·86	..	84·86	29·50	..	29·50
	10	6/2	17·64	5·41	7·81	3·61	..	34·47	1·80	32·67	12·26	0·90	11·36
		8/3	20·86	6·96	6·38	8·69	..	42·89	0·87	42·02	15·04	0·43	14·61

APPENDIX III—TABLE 7—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL MURTIZAPUR													
Lodhipur	11	20	8·72	5·82	9·30	14·83	..	38·67	..	38·67	13·44	..	13·44
		1	13·54	4·93	12·06	9·31	..	39·84	..	39·84	13·85	..	13·85
	12	24/1	11·10	5·55	24·16	18·36	..	59·17	..	59·17	20·57	..	20·57
		24/1A	9·14	2·29	8·00	9·52	..	28·95	..	28·95	10·06	..	10·06
Sultanpur	13	118	18·23	4·56	7·34	22·03	..	52·16	..	52·16	18·14	..	18·14
		16/1	18·72	5·66	6·87	25·46	..	56·71	..	56·71	19·72	..	19·72
	14	2	33·11	14·12	9·41	11·77	..	68·41	26·53	41·88	24·41	9·85	14·56
Karli	15	47/1	14·42	4·12	16·83	4·29	..	39·66	..	39·66	13·79	..	13·79
		80	4·56	3·54	12·15	14·30	..	34·55	..	34·55	12·01	..	12·01
	16	79	11·47	6·51	10·58	8·41	..	36·97	..	36·97	12·85	..	12·85
		45	10·13	3·43	9·02	7·01	..	29·59	..	29·59	10·29	..	10·29
Mohogawan	17	39/1	12·00	4·00	10·66	8·00	..	34·66	..	34·66	12·05	..	12·05
		23/1	13·33	6·00	11·55	8·00	..	38·88	..	38·88	13·52	..	13·52
	18	No Jowar field											
Mchokhed	19	66/12	28·33	4·00	6·00	5·89	..	44·22	..	44·22	15·38	..	15·38
		21+25 +26	10·37	2·49	4·65	9·72	..	27·23	..	27·23	9·47	..	9·47
	20	24	4·56	7·52	5·70	23·36	..	41·14	..	41·14	14·30	..	14·30

APPENDIX III—TABLE 7—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES.		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Taluk Akot													
Lothkhed	21	24/2	12·24	7·35	6·53	..	..	26·12	26·12	..	9·59	9·59	...
	22	56/1A	9·94	4·47	6·71	8·36	..	29·48	25·90	3·58	10·31	9·07	1·24
Sawargaon	23	51	9·54	2·99	5·39	4·16	..	22·08	1·99	20·09	7·77	0·79	6·98
		66/1	77·50	2·50	7·50	..	..	87·50	25·00	62·50	31·73	10·00	21·73
		47/1	7·48	4·48	11·65	12·71	..	36·32	..	36·32	12·63	..	12·63
	24	41/1+2	23·58	9·75	9·76	8·94	..	52·03	15·71	36·32	18·44	5·76	12·68
Mahmadabad	25	77/3	17·70	5·14	8·56	32·00	..	63·40	21·71	41·69	23·64	9·14	14·50
		75/1	16·83	11·82	6·32	..	..	34·97	7·54	27·43	10·56	1·02	9·54
	26	44/1	5·00	6·00	40·00	..	..	51·00		51·00	17·73		17·73
		28/2	6·78	4·08	6·75	4·24	..	21·85		21·85	7·60		7·60
Jainpurpimpri	27	90/2	35·37	4·90	7·62	10·07	..	57·96		57·96	20·15		20·15
		44/2	10·75	5·37	18·80	6·96	..	41·88		41·88	14·56		14·56
	28	87/1	24·00	4·00	9·33	1·97	..	39·30	37·33	1·97	16·15	15·47	0·68
Marodi	29		No Jowar field										
	30	58/2C	20·00	6·90	13·79	3·45	..	44·14	40·69	3·45	19·05	17·85	1·20

APPENDIX III—TABLE 7—contd.

CROP JOWAR—*Holding Sample*

Village	Sl. No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BALAPUR													
Pattiamrai	31		No	Jowar	field								
	32	59/3	5·45	6·54	8·73	..	..	20·72	20·72	..	7·45	7·45	..
Khandala	33	124/2	13·54	3·46	5·77	4·23	..	27·00	9·54	17·46	9·72	3·65	6·07
	34	28/2	21·88	2·50	11·25	3·75	..	39·38	..	39·38	13·69	..	13·69
		28/1	8·46	2·50	5·62	5·00	..	21·58	2·50	19·08	7·38	0·75	6·63
Manki	35		No	Jowar	field								
	36		No	Jowar	field								
Nagod	37	3/2	9·23	3·69	9·54	3·69	..	26·15	..	26·15	9·09	..	9·09
		35	10·33	3·37	10·74	4·41	..	28·85	..	28·85	10·03	..	10·03
		47/2+48/1	10·82	3·61	9·32	0·60	..	24·35	..	24·35	8·47	..	8·47
		10+16	13·38	3·81	8·92	4·67	..	30·78	..	30·78	10·70	..	10·70
	38	57/2+58/1+2	27·82	4·28	10·53	1·55	..	44·18	..	44·18	15·36	..	15·36
		2/3	39·00	4·50	12·50	8·50	..	64·50	..	64·50	2·43		2·43
		12	13·61	3·57	7·15	2·38	..	26·71	7·23	19·48	10·00	3·23	6·77
Tulanga	39	46/1		4·55	2·93	4·78	..	12·26	4·55	7·71	4·22	1·54	2·68
	40	29/2	5·23	10·44	5·91	17·39	..	38·97	..	38·97	13·55	..	13·55

APPENDIX III—TABLE 7—contd.

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Basim													
Chiwara	41	42/2	15·79	6·32	14·21	..	..	36·32	..	36·32	12·63	..	12·63
		66	6·33	8·65	18·38	2·70	..	36·06	..	36·06	12·54	..	12·54
		10/1	11·79	13·89	9·26	8·00	..	42·94	..	42·94	14·93	..	14·93
		5/1	45·63	9·78	13·04	1·78	..	70·23	..	70·23	24·42	..	24·42
		35/3	17·71	5·25	5·25	5·57	..	33·78	..	33·78	11·74	..	11·74
	42	53/3	43·82	4·50	5·00	..	..	53·32	..	53·32	18·54	..	18·54
		53/7	17·46	8·73	13·09	34·91	..	74·19	..	74·19	25·80	..	25·80
		54/1	96·67	8·57	28·57	17·14	..	150·95	..	150·95	52·48	..	52·48
		54/5	14·40	9·60	8·00	4·80	..	36·80	..	36·80	12·80	..	12·80
		20/1	8·25	8·14	20·34	2·71	..	39·44	..	39·44	13·71	..	13·71
Kajalamba	43	101/1	13·12	3·12	6·25	4·69	..	27·18	..	27·18	9·45	..	9·45
		108/1A	6·00	3·50	7·00	..	..	16·50	..	16·50	5·74	..	5·74
		92/4	55·38	12·31	26·66	5·13	..	99·48	..	99·48	34·59	..	34·59
		93/2	10·80	4·50	7·25	6·50	..	29·05	..	29·05	10·10	..	10·10
		108/2	9·94	4·57	6·86	6·86	..	28·23	..	28·23	9·82	..	9·82
	44	17/1	6·00	8·00	6·33	8·00	..	28·33	..	28·33	9·85	..	9·85
		32/3	4·00	6·00	5·33	6·00	..	21·33	..	21·33	7·42	..	7·42
Tapowank	45	11/3B	11·76	3·00	8·00	41·00	..	63·76	..	63·76	22·17	..	22·17
		13	11·59	2·54	8·73	9·82	..	32·68	1·23	31·45	11·17	0·23	10·94
	46	28	14·67	6·67	8·00	28·01	..	57·35	..	57·35	16·46	..	16·46
		56/1	6·67	4·67	4·00	5·33	..	20·67	..	20·67	7·19	..	7·19
Kurha	47	23/2	25·00	10·50	8·75	3·00	..	47·25	..	47·25	26·43	..	12·98
		26	5·33	6·40	13·67	11·93	..	37·33	..	37·33	12·98	..	12·98
	48	2/2	19·20	3·50	7·60	5·33	..	35·63	9·53	26·10	12·60	3·53	9·07
Krishna	49	70	28·50	3·75	9·50	6·25	..	48·00	..	48·00	16·69	..	16·69
		72/1	24·00	1·67	..	3·33	..	29·00		29·00	10·08	..	10·08
		6	24·00	6·00	5·92	2·25	..	38·17	..	38·17	13·27	..	13·27
		7	36·00	9·00	6·00	3·50	..	54·50	..	54·50	18·95	..	18·95
		56	35·60	6·00	7·75	3·75	..	53·10	..	53·10	18·46	..	18·46

CROP JOWAR—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL MANGRULPIR													
Baldeo	51	32/2	17·00	8·00	10·00	42·01	..	77·01	..	77·01	26·78	..	26·78
		10	8·00	9·60	13·20	20·00	..	50·80	..	50·80	17·66	..	17·66
		37/1	14·85	6·00	11·85	9·71	..	42·41	..	42·41	14·74	..	14·74
	52	17/2	2·80	7·37	6·84	3·16	..	20·17	7·36	12·81	8·46	4·03	4·43
		13/1	38·46	8·20	5·98	7·18	..	59·82	30·42	29·40	27·82	17·60	10·22
		13/4	9·42	11·29	8·00	8·47	..	37·18	13·65	23·53	15·46	7·28	8·18
Pardi	53	43/1	67·20	9·60	16·00	28·80	..	121·60	38·40	83·20	48·13	19·20	28·93
		61/3	23·06	6·81	7·51	7·86	..	45·24	10·83	34·41	15·63	3·67	11·96
		113/1	69·34	6·00	10·00	9·33	..	94·67	42·67	52·00	38·08	20·00	18·08
	54	48/4A	7·59	5·54	8·21	4·10	..	25·44	0·51	24·93	8·72	0·05	8·67
Pimpri Kd.	55	93	15·00	6·75	7·25	1·75	..	30·75	..	30·75	10·69	..	10·69
		97/1	23·27	4·00	13·14	12·57	..	52·98	..	52·98	18·42	..	18·42
	56	52	14·66	4·34	8·68	10·36	..	38·04	..	38·04	13·23	..	13·23
Chondhi	57	16	36·75	6·25	5·67	12·25	..	60·92	..	60·92	21·18	..	21·18
		26	17·45	7·76	18·81	10·18	..	54·20	..	54·20	18·84	..	18·84
		17	44·40	8·00	22·30	13·90	..	88·60	..	88·60	30·81	..	30·81
		12	43·64	7·27	10·91	15·27	..	77·09	..	77·09	26·80	..	26·80
		24	63·80	4·00	26·00	21·33	..	115·15	..	115·15	40·04	..	40·04
	58	20/1	17·50	8·00	44·00	28·00	..	97·50	..	97·50	33·90	..	33·90
		20/1A	16·66	7·62	26·66	26·66	..	77·60	..	77·60	26·98	..	26·98
Mendara	59	84	4·00	3·20	5·20	14·70	..	27·10	1·00	25·90	9·30	0·30	9·00
	60	42/1	12·72	4·00		14·50	..	31·22	3·18	28·04	11·02	1·27	9·75
		134/2	31·42	8·00	5·33	21·33	..	66·08	3·57	62·51	23·16	1·43	21·73

APPENDIX III—TABLE 7—contd.

CROP JOWAR—*Field Sample*

Village	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akola												
Masa	37	14·50	5·64	8·59	16·64	..	45·37	..	45·37	15·76	..	15·76
	47	21·41	4·24	15·35	13·74	..	54·74	8·48	46·26	18·50	2·42	16·08
Redhawa	80/2	11·33	5·83	7·93	1·94	..	27·03	..	27·03	9·40	..	9·40
	82	33·60	8·87	14·00	7·60	..	64·07	..	64·07	22·28	..	22·28
Vairatrajapur	8	20·25	5·25	10·50	3·00	..	39·00	11·25	27·75	14·09	4·44	9·65
	30/1+2	95·10	4·57	9·42	6·43	..	115·52	..	115·52	40·17	..	40·17
Bhendhikaji												
Kaulkhed	4	20·62	6·84	19·43	11·43	..	58·32	..	58·32	20·28	..	20·28
	11	57·36	3·77	8·68	11·13	..	80·94	..	80·94	28·14	..	28·14
Tehsil Murtizapur												
Lodhipur	17/5	38·06	13·34	9·93	5·65	..	66·88	..	66·88	23·25	..	23·25
	10/1	26·82	5·36	12·52	5·80	..	50·50	..	50·50	17·56	..	17·56
Sultanpur	8	11·24	7·18	8·29	7·19	..	33·90	7·18	26·72	11·52	2·23	9·29
	4/1	6·25	9·00	15·00	7·50	..	37·75	6·00	31·75	13·04	2·00	4·04
Karli	28	19·72	6·58	8·64	9·95	..	44·89	3·29	41·60	16·34	1·88	14·46
	21	22·22	8·55	12·00	4·56	..	47·33	2·33	45·00	16·98	1·33	15·65
Mohogavan	17	19·71	5·14	18·00	8·57	..	51·42	..	51·42	17·88	..	17·88
	23/2	19·20	4·80	16·00	19·60	..	59·60	..	59·60	20·72	..	20·72
Mohokhed	113/2	11·33	1·56	6·33	13·44	..	32·66	..	32·66	11·32	..	11·36
	23	17·50	3·00	4·25	10·12	..	34·87	..	34·87	12·09	..	12·12

APPENDIX III—TABLE 7—Contd.

CROP JOWAR—*Field Sample*

Village	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOT												
Lothkhed	65+4/1	6·39	3·42	7·43	0·86	..	18·10	3·14	14·96	6·02	0·82	5.20
	53+62/2 +54/1	9·44	4·72	4·57	12·18	..	30·91	..	30·91	10·75	..	10·75
Sawargaon	4/1	14·97	3·49	3·49	3·49	..	25·44	..	25·44	8·84	..	8·84
	39/2	10·32	3·87	11·61	15·48	..	41·28	..	41·28	13·01	..	13·01
Mahamadabad	85/2+3	18·63	10·91	12·27	2·73	..	44·54	44·54	..	14·09	14·09	..
	43/1	4·88	5·85	3·90	4·88	..	19·51	19·51	..	5·86	5·86	..
Jainpur Pimpri	33	7·11	3·04	3·98	0·91	..	15·04	0·40	14·64	5·32	0·23	..
	64	36·84	6·00	9·14	5·71	..	57·69		57·69	20·06	..	20·06
Marodi	24/1	14·85	1·65	7·84	2·06	..	26·40	14·85	11·55	8·66	4·64	4·02
	34/3	11·11	3·33	6·94	1·67	..	23·05	3·33	19·72	8·53	1·67	6·86
TEHSIL BALAPUR												
Pattiamrai	366/3	7·34	3·30	6·06	..	..	16·70	..	16·70	5·81	..	9·52
	354/1A	6·15	2·46	13·95	5·33	..	27·89	..	27·89	9·52	..	5·81
Khandala	26/4	15·00	2·46	6·25	5·00	..	30·00	..	30·00	10·43	..	10·43
	133	5·68	4·09	2·73	4·07	..	16·87	12·50	4·07	6·04	·6 4 2	1·42
Manki	25	10·93	5·00	4·00	2·33	..	22·26	9·45	12·81	11·49	·0	4·45
	69/2	40·00	5·00	13·00	12·00	..	68·00	..	68·00	23·64	7..4	23·64
Nagod	8/1	14·42	5·41	17·66	2·52	..	40·01	..	40·01	13·91	..	13·91
	26/2	28·90	4·86	8·09	17·11	..	58·96	..	58·96	20·50	..	20·50
Tulanga	41	6·36	1·21	1·62	1·21	..	10·40	..	10·40	3·62	..	3·62
	47/1	8·16	4·90	9·80	6·53	..	29·39	..	29·39	10·22	..	10·22

APPENDIX III—TABLE 7—Contd.

CROP JOWAR—*Field Sample*

Village	Survey/ Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	101	16·00	6·00	8·00	18·29	..	48·29	..	48·29	16·79	..	16·79
	54/7	14·22	8·00	13·04	17·95	..	53·21	..	53·21	18·50	..	18·50
Kajalamba	92/6	5·72	7·62	7·62	4·44	..	25·40	..	25·40	8·83	..	8·83
	40/4	25·98	5·47	12·31	8·20	..	51·96	..	51·96	17·54	..	17·54
Tapowan	3	11·87	4·51	7·72	8·10	..	32·20	..	32·20	11·20	..	11·20
	2	15·11	7·22	6·89	8·10	..	37·32	..	37·32	12·98	..	12·98
Kurha	39	5·87	5·87	12·94	3·26	..	27·94	..	27·94	9·71	..	9·71
	49/1	15·44	3·09	18·96	11·47	..	48·96	..	48·96	17·02	..	17·02
Krishna	15	39·00	5·40	8·00	4·40	..	56·80	..	56·80	19·75	..	19·75
	60/12	11·76	6·18	8·82	6·18	..	32·94	..	32·94	11·45	..	11·45
Tehsil Mangrulpir												
Baldeo	16	25·90	8·00	6·67	2·67	..	43·24	43·24		12·62	12·62	..
	31	30·00	5·23	4·89	10·22	..	50·44	13·55	36·89	20·16	7·33	12·83
Pardi	100/1	23·00	3·60	15·20	19·80	..	61·60	..	61·60	21·42	..	21·42
	80/1A	25·00	8·00	20·67	19·33	..	73·00	..	73·00	25·38	..	25·38
Pimpri Kd	39	23·16	4·80	4·80	4·80	..	37·56	..	37·56	13.06	..	13·06
	6/2	48·00	3·00	12·00	30·50	..	93·50	..	93·50	32·51	..	32·51
Chondhi	15/4	34·00	8·00	16·00	14·00	..	72·00	..	72·00	25·03	..	25·03
	24/1	23·47	5·75	20·12	8·38	..	57·72	..	57·72	20·07	..	20·07
Mendara	34/2	11·00	4·80	5·60	12·30	..	33·70	4·00	29·70	11·25	1·00	10·25
	42/2	15·50	2·40	5·40	10·80	..	34·10	13·40	20·70	12·20	5·00	7·20

APPENDIX III—TABLE 8.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ Sub No.	SEED		MANURE		Rent Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
TEHSIL AKOLA											
Masa	1	10/1	1·88	0·40	..	..	1·44	..	1·43	0·43	27·97
		11/3	3·95	0·84	..	..	1·92	..	1·43	0·43	61·01
		12	2·45	0·52	5·10	14·81	1·50	..		0·43	68·86
		42	2·26	0·48	..	..	1·89	..	1·04	0·43	36·17
	2	11	3·00	0·64	..	..	2·72	..		0·43	60·23
		60/2	2·16	0·46	5·39	15·65	2·51	..	1·01	0·63	86·24
		6	3·79	0·71	..	..	2·19	15·43	1·14	0·63	56·80
Redhawa	3	9	4·02	1·00	..	..	1·18	..	..	0·36	38·80
	4	84/4	5·27	1·32		..	2·52	..	..	0·32	40·27
		86	5·27	1·32		..	1·40	..	..	0·32	33·57
Vairatrajapur	5	49/5	3·50	0·66	..	..	3·57	..	3·50	0·45	37·47
		14/1	2·16	0·47	..	..	3·56	..	..	0·45	25·09
	6	23/2	3·90	0·85	..	..	3·28	..	2·20	2·09	62·74
		48/2	3·81	0·83	7·62	22·86	2·94	..	1·90	2·09	76·32
Bhendikaji	7			Omitted							
	8										
Kaulkhed	9	17/5	7·62	1·43	13·23	38·41	1·74	..	..	3·17	105·62
	10	6/2	3.61	0·68	..	..	2·73	..	0·80	0·66	33·32
		8/3	3.48	0·65	..	..	3·59	..	..	0·66	35·56

APPENDIX III—TABLE 8.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Murtizapur											
Lodhipur	11	20	1·45	0·27	..	..	1·63	..	..	0·44	26·74
		1	1·64	0·31	..	..	1·70	9·13	..	0·44	36·76
	12	24/1	5·96	0·94	..	..	1·84	..		0·99	43·44
		24/1A	1·52	0·28	..	..	2·50	..	..	0·99	21·07
									..		
Sultanpur	13	118	1·52	0·24	..	..	1·93	..	6·46	0·61	50·47
		16/1	3·77	0·71	..	..	2·66	..	..	0·61	53·44
	14	2	6·28	0·99	..	..	1·96	..	..	0·66	55·04
Karli	15	47/1	5·49	0·86	..	..	1·29	1·55	..	0·51	33·43
		80	3·04	0·47	..	..	1·30	..	..	0·51	26·94
	16	79	2·98	0·60	..	..	0·65	25·94	..	0·56	54·41
		45	1·71	0·26	..	..	1·20	25·54	..	0·56	51·39
Mohogawan	17	39/1	2·44	0·30	..	..	1·40	..	..	0·91	30·99
		23/1	3·56	0·44	..	..	1·18	..	..	0·91	30·56
	18			No	Jowar	field					
Mohokhed	19	66/12	1·78	0·22	..	..	1·39	..	..	0·47	38·48
		21+25+26	1·66	0·21	0·90	2·61	1·93	..	..	0·47	33·81
	20	24	2·05	0·40	..	..	1·57	..	..	0·68	33·80

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Imple-ments in Rs.	Total money value in Rs.
			Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Akot											
Lothkhed	21	24/2	4·90	0·81	..	..	4·20	25·00	..	0·43	53·81
	22	56/1A	3·48	0·57	3·23	9·38	4·11	..	..	0·87	51·93
Sawargaon	23	51	2·66	0·44	1·24	3·60	5·30	..	..	0·25	29·72
		66/1	10·00	1·64	..	..	2·19	..	..	0·25	75·34
		47/1	3·49	0·53	..	..	5·96	31·15	..	0·25	70·39
	24	41/1+2	17·86	4·79	1·36	3·95	5·06	..	..	0·42	58·14
Mahamadabad	25	77/3	6·28	1·03	1·53+37.8lb. oil cake	6·85	4·42	23·07	0·94	0·33	99·61
		75/1	6·10	1·00	..	..	3·24	20·45	2·75	0·33	66·89
	26	44/1	10·00	2·00	..		2·47	8·79	..	0·51	58·37
		28/2	4·08	0·67	..		5·73	14·38	0·14	0·51	42·67
Jainpurpimpri	27	90/2	7·62	1·25	..	..	2·22	..	..	0·25	42·07
		44/2	9·55	1·57	..	..	3·38	8·87	..	0·25	49·06
	28	87/1	3·20	0·53	..	..	2·95	..	..	0·62	47·11
Marodi	29			No	Jowar field						
	30	58/2C	11·03	1·90	..	..	1·34	..	1·38	1·38	53·75

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Balapur											
Pattiamrai	31			No	Jowar field						
	32	59/3	3·64	0·54	..	..	2·11	60·34	..	0·61	83·87
Khandala	33	124/2	3·08	0·51	..	..	3·14	..	..	0·33	28·56
	34	28/2	4·00	0·66	..	..	3·44	..	..	0·29	34·32
		28/1	4·00	0·66	..	..	3·26	29·03	..	0·29	50·24
Manki	35										
	36			No	Jowar field						
Nagod	37	3/2	4·92	0·81	..	..	2·70	..	..	0·33	31·18
		35	4·14	0·72	...	..	2·96	..	0·69	0·33	32·84
		47/2+48/1	4·12	0·68	..	..	1·60	..	..	0·33	25·36
		10+16	4·00	0·66	4·78	13·88	3·54	..	0·32	0·33	42·12
	38	57/2+58/1+2	3·98	0·65	..	..	2·09	..	..	0·87	34·96
		2/3	6·00	0·99	..	..	3·31	20·22	..	0·87	57·52
		12	4·26	0·70	..	..	2·92	15·00	0·34	0·87	43·26
Tulanga	39	46/1	3·58	0·60	..	..	2·37	..	..	0·29	25·02
	40	29/2	6·96	1·14	..	..	2·70	..	..	0·22	40·36

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease Value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
TEHSIL BASIM											
Chiwara	41	42/2	3·16	0·38	..	..	0·74	41·88	..	0·81	72·89
		66	1·80	0·22	..	..	0·86	..	..	0·81	33·74
		10/1	3·37	0·41	..	..	1·00	..	..	0·81	33·94
		5/1	2·67	0·32	..	..	1·20	..	..	0·81	49·53
		35/3	3·28	0·40	..	..	0·80	..	..	0·81	42·41
	42	53/3	6·67	0·83			1·21	..	..	1·59	43·07
		53/7	2·91	0·36	..	..	1·26	..	..	1·59	55·74
		54/1	4·76	0·60	..	..	0·53	..	..	1·59	97·87
		54/5	3·20	0·35	..	..	1·47	..	..	1·59	34·47
		20/1	3·39	0·42	..	..	0·92	..	..	1·59	42·90
Kajalamba	43	101/1	1·50	0·20	..	..	0·66	30·37	..	0·44	48·44
		108/1A	1·62	0·14	..	..	0·55	4·31	..	0·44	15·58
		92/4	3·08	0·38	..	..	0·85	25·25	..	0·44	92·36
		93/2	1·50	0·20	..	..	0·65	25·25	..	0·44	44·86
		108/2	1·71	0·20	4·42	12·83	0·86			0·44	36·31
	44	17/1	2·17	0·27	..		1·17			0·42	24·07
		32/3	2·00	0·16	..		0·91	22·29	..	0·42	44·53
Tapowan	45	11/3B	9·00	1·09	1·89	3·76	2·11	34·02	..	0·37	88·61
		13	3·29	0·40	..	..	1·33	34·02	..	0·37	61·74
	46	28	2·00	0·24	..	..	1·45	38·00	2·62	0·91	73·67
		56/1	2·00	0·24	..	..	1·12	38·00	..	0·91	52·67
Kurha	47	23/2	4·25	0·53	..	..	0·66	..	2·62	0·99	42·39
		26	2·80	0·34	..	..	0·74	..	..	0·99	32·17
	48	2/2	3·66	0·44	..	..	0·60	..	2·62	0·93	36·03
Krishna	49	70	3·25	0·50	..	..	0·29	..	..	0·61	32·11
		72/1	1·00	0·17	..	..	0·71	..	..	0·61	21·67
		6	3·25	0·50	..	..	1·26	..	..	0·61	34·49
		7	3·25	0·50	..	..	0·72	..	..	0·61	35·71
	50	56	3·25	0·50	..	..	0·21	..	..	0·56	50·37

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Imple-ments in Rs,	Total money value in Rs.
			Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
Tehsil Mangrulpir											
Baldeo	51	32/2	3·17	0·40	·78	2·33	2·08	..	..		
		10	2·80	0·35	..	..	1·90	33·25	1·28	1·03	68·84
		37/1	2·71	0·34	..	..	1·04	52·19	1·28	1·03	75·23
	52	17/2	2·98	0·37	..	..	1·51	..	..	1·11	90·39
		13/1	3·08	0·38	..	..	2·24	..	..	1·11	23·69
		13/4	3·06	0·38	..	..	3·06	..	..	1·11	54·00
											40·24
Pardi	53	43/1	4·80	0·60	..	..	2·70	..	..	1·13	84·85
		61/3	3·84	0·26	..	..	1·54	..	0·70	1·13	38·67
		113/1	4·00	0·50	..	..	1·21	9·03	..	1·13	79·28
	54	48/4A	2·87	0·36	..	..	1·40	..	1·23	0·66	25·89
Pimpri Kd	55	93	2·00	0·25	..	..	0·34	..	..	0·41	24·15
		97/1	1·43	0·18	..	..	0·72	..	..	0·41	37·23
	56	52	1·45	0·18	1·44	4·32	0·63	..	..	0·80	39·51
Chondhi	57	16	4·00	0·50	..	..	0·62	..	0·50	0·37	46·13
		26	3·10	0·39	..	..	..	..	..	0·37	36·01
		17	4·50	0·50	..	..	0·23	..	..	0·37	60·12
		12	3·27	0·48	..	..	0·70	..	..	0·37	48·14
		24	4·00	0·52	4·00	12·00	1·22	..	1·28	0·37	79·96
	58	20/1	6·00	0·72	..	..	0·28	152·31	..	0·49	214·04
		20/1A	11·43	1·43	..	..	0·30	152·31	..	0·49	205·87
Mendara..	59	84	3·00	0·32	..	..	1·39	..	..	0·64	31·33
	60	42/1	1·00	0·12	..	..	1·54	..	..	0·72	26.54
		134/2	5·33	0·67	..	..	3·37	..	2·68	0·72	58·99

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
		Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
TEHSIL AKOLA										
Masa	37	5·64	1·20	..	..	..	..	..	..	42·87
	47	2·83	0·60	..	..	..	..	..	..	47·59
Redhawa	80/2	2·91	0·73	..	..	..	..	..	..	21·78
	82	4·00	1·00	..	..	..	..	..	..	44·92
Vairatrajapur	8	5·00	0·94	..	..	..	..	0·86	..	35·13
	30/1+2	5·71	1·07	..	..	..	..	0·86	..	70·81
Bhendikaji				Omitted						
Kaulkhed	4	5·70	1·07	7·07	20·53	..	..	..	..	64·47
	11	3·40	0·42	3·77	10·94	..	..	..	..	62·07
TEHSIL MURTIZAPUR										
Lodhipur	17/5	4·69	0·88	..	..	..	..	..	..	41·37
	10/1	2·24	0·42	..	..	..	..	..	..	32·76
Sultanpur	8	2·58	0·48	..	..	..	..	..	..	22·22
	4/1	6·50	1·03	...	..	..	..	..	..	30·60
Karli	28	4·70	0·73	..	..	..	..	..	..	48·50
	21	5·56	0·87	..	..	..	..	..	..	41·75
Mohogawan	17	3·00	0·38	..	..	..	..	..	..	39·07
	23/2	2·40	0·30	..	..	..	..	..	..	47·41
Mohokhed	113/2	1·78	0·44	..	..	..	..	..	..	32·16
	23	2·00	0·32	..	..	..	..	..	..	30·68

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Imple-ments in Rs.	Total money value in Rs.
		Quan-tity in lb.	Money value in Rs.	Quan-tity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
TEHSIL AKOT										
Lothkhed	65+4/1	4·71	0·77	..	..	..	..	0·33	..	21·70
	53+62/2 +54/1	5·78	0·95	..	..	..	..	1·90	..	29·67
Sawargaon	4/1	3·32	0·55	3·33	8·32	..	..	4·16	..	33·23
	39/2	5·16	0·85	..	..	..	..	..	..	44·66
Mahamadabad	85/2+3	11·36	1·87	..	..	..	..	..	..	50·06
	43/1	5·85	0·85	..	..	..	..	..	..	26·33
Jainpur Pimpri	33	7·28	1·20	..	..	..	..	..	..	15·58
	64	5·71	0·94	..	..	..	..	..	..	45·65
Marodi	24/1	3·30	0·57	..	..	..	..	1·24	..	20·73
	34/3	2·22	0·38	..	..	..	..	1·11	..	26·82
TEHSIL BALAPUR										
Pattiamrai	366/3	2·57	0·42	..	..	..	..	..	..	16·70
	354/1A	1·23	0·20	..	..	..	..	..	..	29·39
Khandala	26/4	2·82	0·50	..	..	..	..	..	..	26·96
	133	2·22	0·63	..	..	..	..	..	..	15·78
Manki	25	5·83	0·73	..	..	..	..	..	..	22·81
	69/2	4·00	0·50	..	..	..	..	..	..	38·39
Nagod	8/1	4·32	0·72	..	..	..	..	2·46	..	38·11
	26/2	3·70	0·61	..	..	..	..	2·46	..	41·33
Tulanga	41	1·21	0·23	64·6 lb oilcake	5·08	..	..	..	..	19·27
	47/1	2·45	0·46	..	..	..	..	..	..	25·62

APPENDIX III—TABLE 8—contd.

CROP JOWAR—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Imple-ments in Rs.	Total money value in Rs.
		Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	
TEHSIL BASIM										
Chiwara	101	2·06	0·23	..	..	..	..	..	..	38·47
	54/7	2·37	0·30	..	..	..	..	..	..	42·93
Kajalamba	92/6	2·06	0·24	..	..	..	..	..	..	15·13
	40/4	3·42	0·43	..	..	..	..	..	..	33·58
Tapowan	3	5·70	0·69	..	..	..	..	2·47	..	25·04
	2	3·33	0·40	..	..	..	..	2·47	..	25·21
Kurha	39	1·68	0·24	..	..	..	..	..	..	22·04
	49/1	3·09	0·44	..	..	..	..	..	..	35·06
Krishna	15	2·60	0·40	..	..	..	..	..	..	42·16
	60/12	4·70	0·74	..	..	..	..	2·47	..	38·51
TEHIAL MANGRULPIR										
Baldeo	16	3·33	0·42	5·33	15·48	..	..	..	..	69·01
	31	2·22	0·28	..	..	..	..	..	..	40·39
Pardi	100/1	2·40	0·30	4·00	12·00	..	..	9·95	..	63·54
	80/1A	3·33	0·50	1·33	4·00	..	..	..	..	54·66
Pimpri Kd.	39	2·00	0·21	0·70	2·03	..	..	..	..	30·17
	6/2	2·00	0·21	..	..	..	..	..	..	50·84
Chondhi	15/4	4·00	0·50	10·00	30·00	..	..	..	..	95·90
	24/1	4·31	0·54	..	..	..	..	..	..	48·52
Mendara	34/2	1·20	0·13	..	..	..	..	1·88	..	25·99
	42/2	2·00	0·25	..	..	..	..	..	..	31·30

APPENDIX III—TABLE 9

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Mise.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	11/3	67·59	5·91	30·41	27·60		131·51	122·50	9·01	16·42	15·34	1·08
		12	8·00	11·35	32·88	8·44		60·87	50·65	10·22	7·57	6·45	1·12
	2	6	34·17	5·33	26·67	8·67		74·84	73·17	1·67	7·37	7·16	0·21
Redhawa	3												
	4		No Groundnut Field										
Vairatrajapur	5												
	6												
Bhendikaji	7					Omitted							
	8					Omitted							
Kaulkhed	9												
	10		No Groundnut Field										
Tehsil Murtizapur													
Lodhipur	11	24/1	25·45	10·91	65·45	..	..	101·81	18·18	83·63	11·04	1·81	9·23
	12	10/2	43·52	14·66	22·66	8·00	..	88·84	20·42	68·42	16·08	4·51	11·57
Sultanpur	13												
	14		No Groundnut Field										

APPENDIX III—TABLE 9—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-N o.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL MURTIZAPUR													
Karli	15	80	9·81	9·16	32·05	37·06	..	88·08	53·63	34·45	14·23	9·75	4·48
	16	79	75·30	5·51	22·81	15·47	..	69·09	15·08	54·01	9·28	1·49	7·79
		45	62·98	5·96	24·97	40·85	..	135·76	18·16	116·60	15·31	1·60	13·71
Mahogavan	17	22/1	42·74	9·87	32·88	16·79	..	100·28	69·05	31·23	21·58	17·87	3·71
	18	14/1A	14·05	6·24	21·07	28·09	..	69·45	40·58	28·87	8·84	5·12	3·72
Mohokhed	19	7	42·28	5·63	7·72	5·23	..	60·86	56·03	4·83	10·48	9·62	0·86
	20	62	18·17	7·16	11·41	6·62	..	43·36	41·23	2·13	6·98	6·65	0·33
		4/1	11·37	7·65	16·61	6·99	10·93	53·55	49·18	4·37	8·72	7·79	0·93
TEHSIL AKOT.													
Lothkhe	21												
	22												
Sawargaon	23		No Groundnut Field										
	24												
Mahamadabad	25												
	26	28/2	11·00	12·00	12·00	12·00	..	47·00	39·00	8·00	5·51	4·30	1·21
Jainpurpimpri	27												
	28		No Groundnut Field										
Marodi	29												
	30												

APPENDIX III—TABLE 9—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Balapur													
Pattiamrai	31												
	32	129	13·91	5·21	15·04	38·73	..	72·89	69·07	3·82	9·26	8·74	0·52
		60/B	17·14	11·42	70·36	10·00	..	109·42	76·56	32·86	15·80	12·06	3·74
Khandala	33												
..	34												
Manki	35												
	36												
Nagod	37		No Groundnut Field										
	38												
Tulanga	39												
	40												
Tehsil Basim													
Chiwara	41		No Groundnut Field										
	42	53/3	66·68	9·00	10·00	30·40	..	116·08	25·86	90·22	9·92	2·47	7·45
Kajalamba	43		No Groundnut Field										
	44	69/5	4·50	6·00	12·00	17·00	..	39·50	31·00	8·50	4·51	3·60	0·91
Tapowan	45												
	46		No Groundnut Field										

APPENDIX III—TABLE 9—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Basim													
Kurha	47	25	49·79	8·57	20·57	..	..	78·92	67·77	11·16	8·16	7·04	1·12
	48	2/2	24·79	18·67	76·00	26·00	..	145·46	93·19	52·27	14·68	9·38	5·30
Krishna	49	72/1	18·75	6·00	20·67	64·01	..	109·43	37·42	72·01	11·44	4·71	6·73
	50	56	121·10	4·57	40·00	21·71	..	187·38	..	187·38	16·87	..	16·87
Tehsil Mangrulpir													
Baldeo	51	34/2	56·61	7·38	16·71	15·00	2·67	97·83	57·99	39·84	12·10	7·38	4·72
	52		No Groundnut Field										
Pardi	53												
	54		No Groundnut Field										
Pimpri Kd	55												
	56	83/1	48·07	22·00	29·00	38·00	..	137·00	35·00	102·00	19·04	5·75	13·29
Chondhi	57	18	95·72	5·71	41·78	14·86	..	158·07	146·43	11·64	16·36	15·22	1·14
	58	20/1	17·18	7·85	49·08	..	..	74·11	29·45	44·66	7·49	3·07	4·42
		20/1A	12·20	7·80	29·27	0·50	..	49·77	21·46	28·31	5·08	2·25	2·83
Mendara	59	84	23·76	19·01	10·10	..	..	52·87	48·94	3·96	5·02	4·60	0·42
	60	80	83·33	5·00	6·67	0·92	..	95·92	82·50	13·42	10·37	8·96	1·41

APPENDIX III—TABLE 9—contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-Sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akola												
Masa	5	19·56	8·00	33·00	13·00	..	78·56	34·50	44·06	8·92	3·83	5·12
Redhawa	31	17·45	7·50	20·00	4·00	..	48·95	19·27	29·68	8·83	4·28	4·55
	11/3	13·71	4·80	9·60	6·40	1·60	36·11	26·97	9·16	4·78	3·26	1·52
Vairatrajapur	38+39	12·46	9·00	15·60	6·00	..	43·06	35·86	7·20	7·44	7·04	0·40
Bhendikaji				Omitted								
Kaulkhed		No	Groundnut Field									
Tehsil Murtizapur												
Lodhipur	18/4	68·29	5·69	21·50	15·18	..	110·66	13·28	97·38	11·96	1·98	9·98
	9/2	115·26	5·16	17·20	23·22	..	160·84	77·41	83·43	16·55	8·17	8·38
Sultanpur		No	Groundnut Field									
Karli	41	115·83	5·30	19·87	21·58	..	162·58	162·58	..	19·24	19·24	..
	28	10·44	5·83	18·00	29·50	..	63·77	19·05	44·72	8·40	6·24	2·16
Mohogawan	21/1	89·20	12·00	57·60	50·40	..	209·20	110·40	98·80	27·31	16·88	10·43
	54/3	111·00	9·00	102·00	36·00	..	258·00	80·00	177·00	29·57	10·34	19·23
Mohokhed	2/1	15·00	4·09	15·00	5·00	..	39·09	23·64	15·45	6·69	3·98	2·71

APPENDIX III—TABLE 9—Contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOT												
Lothkhed		No Groundnut field										
Sawargaon	2/5	10·71	9·84	21·45	11·62	..	53·62	52·08	1·54	7·62	7·48	0·14
Mahamadabad	3	58·28	7·95	29·14	7·15	..	102·52	102·52	102·52	16·60	16·60	..
	26	58·88	8·03	15·72	2·51	..	85·14	51·68	33·46	12·.5	7·44	5·11
Jainpur Pimpri		No Groundnut field										
Marodi		No Groundnut field										
TEHSIL BALAPUR												
Pattiamrai	346	26·28	12·26	19·27	8·76	..	66·57	41·17	25·40	9·88	6·57	3·31
	424/3	76·00	10·08	22·40	24·00	..	132·48	34·40	98·08	20·71	5·20	15·51
Khandala		No Groundnut field										
Nagod		No Groundnut field										
Manki	64/2	50·50	15·00	5·00	7·50	2·50	80·50	71·50	9·00	10·37	9·25	1·12
	98/1	27·50	7·50	16·00	22·00	..	73·00	36·75	36·25	10·78	5·62	5·16
Tulanga	13/3	24·56	16·53	4·21	5·61	..	44·91	22·11	22·80	6·88	2·63	4·17
	14/2	36·99	12·85	14·00	12·85	11·14	87·83	72·26	15·57	15·13	12·70	2·43

APPENDIX III—TABLE 9—Contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / sub-No.	MAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	33	44·52	7·38	24·00	16·62	11·08	103·60	14·13	89·47	9·18	1·25	7·93
	39	44·52	13·33	28·57	40·00	..	126·42	34·29	92·18	22·38	3·75	18·63
Kajalamba	97/4	53·14	4·57	12·72	32·00	7·83	111·25	89·71	21·54	11·10	10·05	0·85
	66/1	17·05	5·25	8·00	..		30.30	13.47	16.83	9·07	3.22	5.85
Tapowan	No Groundnut field											
Kurha	10	44·52	9·67	12·37	41·87	..	108·41	88·08	20·33	12·08	9·81	2·27
	36/2	34·96	8·42	24·96	37·28	..	105·62	67·92	37·70	12·88	8·61	4·27
Krishna	13	39·00	6·00	11·00	33·00	..	89·00	34·50	54·50	7·83	3·34	4·49
	19/2	59·99	5·00	17·33	30·22	..	122·54	91·43	21·11	10·45	8·74	1·71
Tehsil Mangrulpir												
Baldeo	11	52·50	9·75	21·00	11·00	..	94·25	59·75	35·00	14·23	10·03	4·20
	15	62·25	10·80	32·10	10·50	..	115·65	114·40	1·25	12·82	12·68	0·14
Pardi	24/2	47·00	6·00	22·75	12·00	30·50	113·25	102·50	10·75	13·83	12·57	1·26
Pimpri Kd	33/2	118.80	3.60	44.40	15.40	..	182.20	131.80	50.40	30.07	23.02	7.05
	47	16·07	10·00	26·00	34·34	..	86·41	78·41	8·00	13·35	12·04	1·31
Chondhi	19/1	92·50	6·00	31·00	2·00	..	131·50	60·25	71·25	12·20	5·10	7·10
	13/1	48·75	8·00	58·50	20·00	..	135·35	..	135·25	24·14	..	24·14
Mendara	No Groundnut field											

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey/ Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL AKOLA													
Masa	1	11/3	8·73	4·93	16·76	15·77	..	46·19	46·19	..	3·57	3·57	
	..	12	..	8·00	28·89	57·77	..	94·66	94·66	..	4·82	4·83	..
	2	6	22·34	8·00	22·00	8·00	..	60·34	60·34	..	5.35	5·35	..
Redhawa	3												
	4												
Vairatrajapur	5		No	Groundnut field									
	6												
Bhendikaji	7			Omitted									
	8			Omitted									
Kaulkhed	9												
	10		No	Groundnut field									
TEHSIL MURTIZAPUR													
Lodhipur	11	24/1	21·82	21·82	..	43·64	..	87·28	21·82	65·46	10·72	2·91	7·81
	12	10/2	51·76	16·00	16·00	13·13	..	97·09	69·09	28·00	10·16	7·49	2·67
Sultanpur	13												
	14		No	Groundnut field									
Karli	15	80	..	2·29	25·50	..	..	27·79	21·58	6·21	2·05	1·57	0·48
	16	79	..	7·36	..	22·72	..	30·08	22·69	7·39	3·22	2·01	1·21
		45	46·24	8·79	30·65	25·53		111·21	36·60	74·61	8·39	2·00	6·39
Mohogawan	17	22/1	6·58	9·86	19·73	19·73	..	55·90	52·61	3·29	4·59	4·36	0·23
	18	14/1A	12·49	9·36	16·39	10·54	..	48·78	46·44	2·34	3·79	3·63	0·16
Mohokhed	19	7	4·69	4·83	16·11	9·66	..	35·29	35·29	..	5·42	5·42	..
	20	62	..	5·33	15·80	44·44	..	65·57	65·57	..	9·06	9·06	..
		4/1	15·74	6·56	43·72	52·46	..	118·48	118·48	..	16·83	16·83	..

APPENDIX III—TABLE 10—Contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holdings	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21												
	22												
Sawargaon	23												
	24		No Groundnut field										
Mahamadabad	25												
	26	28/2	61·00	..	..	64·00	..	125·00	88·00	37·00	6·04	4·53	1·51
Jainpur Pimpri	27												
	28												
Marodi	29		No Groundnut field										
	30												
Tehsil Balapur													
Pattiamrai	31		No Groundnut field										
	32	129	13·04	3·91	13·91	..	..	30·86	30·86	..	1·98	1·98	..
		60/B	34·28	22·86	40·00	40·00	..	137·14	137·14	..	10·21	10·21	..
Khandala	33												
	34												
Manki	35												
	36		No Groundnut field										
Nagod	37												
	38												
Tulanga	39												
	40												

APPENDIX III—TABLE 10—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holdings	Survey / Sub-No.	WOMAN LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TEHSIL BASIM													
Chiwara	41		No	Groundn	ut Field								
	42	53/3	13·97	1·50		27·20	..	42·67	41·17	1·50	3·02	2·91	0·11
Kajalamba	43		No	Groundn	ut Field								
	44	69/5	44·00	6·00	16·50	33·00	24·00	123·50	123·50	..	6·53	6·53	..
Tapowan	45 }		No	Groundn	ut Field								
	46 }												
Kurha	47	25	38·89	..	7·97	34·28	1·71	82·85	82·25	..	11·54	11·54	..
	48	2/2	41·99	14·00	84·67	90·67	..	231·33	196·66	34·67	15·40	12·91	2·49
Krishna	49	72/1	14·50	6·00	36·51	65·67	..	122·68	116·35	6·33	7·77	7·11	0·66
	50	56	109·62	4·57	124·00	34·28	..	272·47	30·86	241·61	15·08	1·61	13·47
TEHSIL MANGRULPIR													
Baldeo	51	34/2	3·69	8·84	19·17	100·33	..	132·03	109·92	22·11	9·65	6·35	3·30
	52		No	Groundn	ut Field								
Pardi	53 }												
	54 }		No	Groundn	ut Field								
Pimpri Kd	55 }												
	56	83/1	..	..	..	72·00	..	72·00	63·00	9·00	6·92	5·56	1·36
Chondhi	57	18	82·72	4·57	37·72	51·43	..	176·44	176·44	..	9·38	9·38	..
	58	20/1	..	5·89	104·30	57·83	..	168·02	168·02	..	8·08	8·08	..
		20/1A	..	5·85	29·27	31·50	..	66·62	66·62	..	7·65	7·65	..
Mendara	59	84	7·92	19·01	63·76	21·98	..	112·67	112·67	..	9·81	9·81	..
	60	80	..	5·00	22·66	17·00	..	44·66	44·66	..	3·65	3·65	..

APPENDIX III—TABLE 10—contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	Woman labour in hours								Money value in rupees		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akola												
Masa	5	24·00	6·00	32·00	14·00	..	76·00	76·00	..	5·21	5·21	..
Redhawa	31	4·69	7·50	..	4·00	..	16·19	12·19	4·00	2·22	1·59	0·63
	11/3	9·14	4·80	27·43	28·80	..	70·17	59·66	10·51	8·28	7·26	1·02
Vairatrajapur	38+39	14·40	7·20	71·40	56·40	..	149·40	149·40	..	8·15	8·15	..
Bhendikaji		Omitted										
Kaulkhed		No Groundnut Field										
Tehsil Murtizapur												
Lodhipur	18/4	21·50	5·69	18·97	32·88	..	79·04	72·72	6·32	8·51	7·97	0·54
	9/2	77·42	2·58	21·07	..	..	101·07	98·49	2·58	7·32	7·09	0·23
Sultanpur		No Groundnut Field										
Karli	41	7·95	3·97	19·68	15·71	..	47·31	47·31	..	3·74	3·74	..
	28	17·89	3·83	23·00	22·50	..	67·22	63·22	4·00	5·08	4·79	0·29
Mohogawan	21/1	..	12·00	144·00	36·00	..	192·00	175·20	16·80	12·84	11·50	1·34
	54/3	36·00	9·00	45·00	..	..	90·00	33·00	57·00	6·98	2·41	4·57
Mohokhed	2/1	13·64	6·82	59·99	13·64	..	94·09	94·09	..	12·84	12·84	..

APPENDIX III—TABLE 10—contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	Woman labour in hours								Money value in rupees		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akot												
Lothkhed		No Groundnut Field										
Sawargaon	2/5	34·62	3·28	55·63	77·68	..	171·21	171·21	..	9·20	9·20	..
Mahamadabad	3	59·60	.	196·03	119·73	..	375·36	375·36	..	18·70	18·70	..
	26	149·57	..	30·78	16·06	..	196·41	196·41	..	13·65	13·65	..
Jainpur Pimpri		No Groundnut Field										
Marodi		No Groundnut Field										
Tehsil Balapur												
Pattiamrai	346	17·52	..	21·02	18·98	..	57·52	57·52	..	4·67	4·67	..
	424/3	28·80	38·40	46·40	80·00	..	193·60	180·80	12·80	13·76	12·90	0·86
Khandala		No Groundnut Field										
Nagod	64/2	32·50	..	5·00	5·00	..	42·50	32·50	10·00	2·96	2·38	0·58
	98/1	40·00	..	69·25	16·00	..	125·25	120·75	4·50	5·93	5·67	0·26
Manki		No Groundnut Field										
Tulanga	13/3	28·07	..	16·84	6·32	..	51·23	35·79	15·44	2·16	1·66	0·50
	14/2	24·28	..	18·85	..	..	43·13	43·13	..	2·30	2·30	..

APPENDIX III—TABLE 10—contd.
CROP GROUNDNUT—*Field Sample*

Village	Survey sub-No.	Woman labour in hours								Money value in rupees		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent.
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	33	40·15	5·54	36·92	40·62	..	123·23	123·23	..	8·10	8·10	..
	39	40·15	0·33	77·14	..	..	117·62	117·62	..	7·27	7·27	..
Kajalamba	97/4	80·00	6·86	96·00	6·86	..	189·72	125·15	64·57	5·55	5·27	0·28
	66/1	8·16	3·94	..	32·00	..	44·10	8·31	35·79	3·95	0·90	3·05
Tapowan		No Groundnut Field										
Kurha	10	40·15	7·25	14·49	12·88	..	74·77	53·03	21·74	3·78	2·47	1·31
	36/2	25·27	16·85	63·18	34·22	..	139·52	139·52		10·86	10·86	..
Krishna	13	63·00	3·00	27·75	60·00	..	153·75	153·75	..	8·91	8·91	..
	19/2	2·22	5·00	..	49·77	..	56·99	56·99	..	4·06	4·06	..
Tehsil Mangrulpir												
Baldeo	11	65·00	9·75	78·25	200·00	..	353·00	334·00	19·00	19·43	18·15	1·28
	15	37·50	10·80	48·00	67·00	..	163·30	163·30	..	12·55	12·55	..
Pardi	24/2	87·00		38·00	78·00	..	203·00	195·00	8·00	6·29	5·36	0·93
Pimpri Kd	33/2	39·20	7·20	45·60	1·20	..	93·20	77·60	15·60	4·51	3·63	0·88
	47	1·71	6·00	20·00	16·67	..	44·38	44·38	..	5·94	5·94	..
Chondhi	19/1	37·50	6·00	123·50	50·00	..	217·00	217·00	..	21·43	21·43	..
	13/1	40·25	24·00	88·00	40·00	..	192·25	30·00	162·25	12·05	1·41	10·64
Mendara		No Groundnut Field										

APPENDIX III—TABLE 11

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akola													
Masa	1	11/3	45·34	4·93	14·64	1·13	..	66·04	..	66·04	22·96	..	22·96
		12	7·11	8·00	12·44	0·89	..	28·44	..	28·44	9·89	..	9·89
	2	6	36·51	8·00	16·00	..	..	60·51	..	60·51	21·06	..	21·06
Redhawa	3												
	4												
			No Ground nut field										
Vairatrajapur	5												
	6												
Bhendikaji	7		Omitted										
	8		Omitted										
Kaulkhed	9												
	10		No Ground nut field										

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equivalent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Murtizapur													
Lodhipur	11	24/1	21·82	10·91	36·36	..	..	69·09	..	69·09	24·02	..	24·02
	12	10/2	58·23	9·33	8·67	..	..	76·23	..	76·23	26·50	..	26·50
Sultanpur	13												
	14			No	Ground	nut Field							
Karli	15	80	3·92	4·58	16·35	9·81	..	34·66	..	34·66	12·05	..	12·05
	16	79	11·47	5·51	3·93	2·23	..	23·14	..	23·14	4·38	..	4·38
		45	50·50	5·96	5·96	..	..	62·42	..	62·42	21·70	..	21·70
Mohogawan	17	22/1	32·88	9·86	16·44	..	..	59·18	..	59·18	20·58	..	20·58
	18	14/1A	14·05	6·24	9·36	2·34	..	31·99	..	31·99	11·12	..	11·12
Mohokhed	19	7	24·19	4·83	2·42	2·42	..	33·86	..	33·86	11·77	..	11·77
	20	62	13·58	6·22	5·23	3·26	..	28·29	..	28·29	9·84	..	9·84
		4/1	8·74	7·65	3·93	1·31	..	21·63	..	21·63	7·52	..	7·52

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Akot													
Lothkhed	21												
	22												
Sawargaon	23		No	Ground	nut field								
	24												
Mahmadabad	25												
	26	28/2	8·00	9·00	4·00	12·00	..	33·00	5·00	28·00	12·32	2·58	9·74
Jainpur Pimpri	27												
	28												
			No	Ground	nut field								
Marodi	29												
	30												

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Balafur													
Pattiamrai	31		No	Ground	nut field								
	32	129	20·87	3·91	5·12			30·00	30·00		8·52	8·52	
		60/B	11·43	5·71	20·57			37·71	31·71		15·64	15·64	
Khandala	33												
	34												
Manki	35												
	36												
			No	Ground	nut field								
Nagod	37												
	38												
Tulanga	39												
	40												

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Basim													
Chiwara	41		No Groundnut Field										
	42	53/3	43·82	4·50	5·00	..	..	53·32	..	53·32	18·54	..	18·54
Kajalamba	43		No Groundnut Field										
	44	69/5	3·00	6·00	7·50	1·50	..	18·00	..	18·00	6·26	..	6·26
Tapowan	45 46		No Groundnut Field										
Kurha	47	25	35·72	8·57	10·28	..	..	54·57	..	54·57	18·57	..	18·97
	48	2/2	17·60	14·00	38·00	..	..	69·60	16·53	53·07	24·48	6·03	18·45
Krishna	49	72/1	18·00	6·00	10·34	1·33	..	35·67	..	35·67	12·40	..	12·40
	50	56	48·02	3·43	6·28	2·28	..	60·01	..	60·01	2·86	..	20·86

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Holding Sample*

Village	Serial No. of holding	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
			Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tehsil Mangrulpir													
Baldeo	51	34/2	46·23	7·38	7·08	2·67	..	63·36	..	63·36	22·03	..	22·03
	52		No Groundnut Field										
Pardi	53												
	54		No Groundnut Field										
Pimpri Kd	55												
	56	83/1	48·00	11·00	8·50	..	..	67·50	..	67·50	23·47	..	23·47
Chondhi	57	18	72·80	5·70	8·57	1·14	..	88·28	..	88·28	30·69	..	30·69
	58	20/1	17·18	7·85	43·19	..	..	68·22	..	68·22	23·72	..	23·72
		20/1A	12·20	7·80	27·32	..	..	47·32	..	47·32	16·45	..	16·45
Mendara	59	84	3·96	19·01	4·75	..	..	27·72	7·13	20·59	8·94	1·78	7·16
	60	80	59·17	5·00	3·33	..	..	67·50	7·09	60·41	23·84	2·84	21·00

APPENDIX III—TABLE 11—Contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL AKOLA												
Masa	5	12·80	12·00	18·00	..	..	42·80	..	42·80	14·88	..	14·88
Redhawa	31	15·62	7·50	10·00	..	..	23·12	..	33·12	11·52	..	11·52
	11/3	8·23	4·80	4·80	..	..	17·83	..	17·83	6·20	..	6·20
Vairatrajapur	38+39	11·68	5·40	5·40	0·60	..	23·08	12·60	10·48	9·04	5·40	3·74
Bhendikaji		Omitted										
Kaulkhed		No Groundnut field										
TEHSIL MURTIZAPUR												
Lodhipur	18/4	45·53	5·69	11·38	0·95	..	63·55	..	63·55	21·77	..	21·77
	9/2	67·10	2·58	9·46	..	..	79·14	..	79·14	27·53	..	27·52
Sultanpur		No Groundnut field										
Karli	41	58·30	3·97	6·81	0·95	..	70·03	..	70·03	24·35	..	24·33
	28	9·54	3·83	8·00	0·50	..	21·87	..	21·87	7·60	..	7·60
Mohogawan	21/1	70·00	8·00	24·00	4·80	..	106·80	..	106·80	37·13	..	37·13
	54/3	87·00	6·00	9·00	..	..	102·00	..	102·00	25·46	..	35·46
Mohokhed	2/1	10·91	2·27	5·91	3·18	..	22·27	..	22·27	7·74	..	7·74

APPENDIX III—TABLE 11—Contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	Bullock labour in hours								Money value in rupees		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent.
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Akot												
Lothkhed		No Groundnut field										
Sawargaon	2/5	3·64	4·37	6·24	5·24	..	19·49	..	19·49	6·78	..	6·78
Mahamadabad	3	15·89	4·77	15·89	..	..	36·55	..	36·55	12·71	..	12·71
	26	43·83	4·02	6·52	0·84	..	55·21	..	55·21	19·20	..	19·20
Jainpur Pimpri		No Groundnut field										
Marodi		No Groundnut field										
Tehsil Balapur												
Pattiamarai	346	18·98	5·25	5·26	..	..	29·49	3·50	25·99	11·08	2·04	9·04
	424/3	35·20	9·60	7·20	..	..	52·00	9·60	42·00	18·74	4·00	14·74
Khandala		No Groundnut field										
Manki	64/2	30·00	5·00	2·50	2·50	..	40·00	2·50	37·50	15·04	2·00	13·04
	98/1	22·50	2·50	6·00	2·00	..	33·00	5·25	27·75	11·84	2·19	9·65
Nagod		No Groundnut field										
Tulanga	13/3	7·02	4·21	1·40	2·81	..	15·44	..	15·44	5·37	..	5·37
	14/2	9·28	6·43	7·00	3·43	..	26·14	..	26·14	9·09	..	9·09

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post-sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
Tehsil Basim												
Chiwara	33	27·60	5·54	7·38	..	..	40·52	..	40·52	14·09	..	14·09
	39	27·60	6·67	11·43	..	..	45·70	..	45·70	15·89	..	15·89
Kajalamba	97/4	22·29	4·56	6·86	..	..	33·71	9·14	24·57	12·25	3·71	8·54
	66/1	4·38	4·81	6·00	..	..	15·19	..	15·19	5·28	..	5·28
Tapowan		No Groundnut Field										
Kurha	10	27·60	7·25	6·17	0·54	..	41·56	9·97	31·59	13·95	3·28	10·67
	36/2	30·33	4·21	9·27	0·63	..	44·44	26·96	17·48	15·14	9·06	6·08
Krishna	13	33·75	4·50	5·50	1·25	..	45·00	..	45·00	15·65	..	15·65
	19/2	46·67	5·00	9·33	2·22	..	63·22	..	63·22	21·98	..	21·98

APPENDIX III—TABLE 11—contd.

CROP GROUNDNUT—*Field Sample*

Village	Survey / Sub-No.	BULLOCK LABOUR IN HOURS								MONEY VALUE IN RUPEES		
		Pre-sowing	Sowing	Post sowing	Har-vesting	Misc.	Total	Paid	Unpaid	Total money value	Paid money value	Unpaid money equiva-lent
1	2	3	4	5	6	7	8	9	10	11	12	13
TEHSIL MANGRULPIR												
Baldeo..	11	30·00	9·75	8·75	1·50	..	50·00	21·50	28·50	22·10	12·19	9·91
	15	46·00	10·80	6·00	6·45	..	69·25		69·25	24·08		24·08
Pardi	24/2	42·00	3·00	9·50	..	..	54·50	..	54·50	18·95	..	18·95
Pimpri Kd	33/2	21·60	7·20	15·60	..	..	44·40	..	44·40	15·30	..	15·30
	47	6·43	8·00	12·00	..	..	26·43	..	26·43	9·19	..	9·19
Chondhi	19/1	87·50	6·00	14·50	..	..	108·00	..	108·50	37·55	..	37·55
	13/1	43·75	8·00	23·25	..	..	75·00	..	75·00	26·08	..	26·08
Mendara		No	Groundn	ut Field								

APPENDIX III—TABLE 12

CROP GROUNDNUT—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
TEHSIL AKOLA											
Masa	1	11/3	101·38	42·66	..	..	1·92	..	..	0·43	87·96
		12	106·66	45·00	..	..	1·50	..	..	0·43	69·22
	2	6	46·68	20·00	..	..	2·19	15·43	2·58	0·63	74·59
Redhawa	3	No groundnut field									
	4	" "		"							
				"							
Vairatrajpur	5	" "		"							
	6	" "									
Bhendikaji	7	Omitted.									
	8										
Kaulkhed	9	No Groundnut field									
	10	" "		"							
TEHSIL MURTIZAPUR											
Lodhipur	11	24/1	37·34	13·33	..	..	1·98	..	..	0·44	68·49
	12	10/2	50·91	18·18	..	..	1·84	..	..	0·99	66·79
Sultanpur	13	No Groundnut field									
	14										
Karli	15	80	31·61	11·06	..	..	1·30			0·51	41·20
	16	79	38·02	13·31	..	..	0·65	25·94	..	0·56	57·34
		45	42·56	14·89	..	..	1·20	25·54	..	0·56	87·59
Mohogawan	17	22/1	40·00	11·51	..	..	1·03			0·91	60·20
	18	14/1A	39·02	11·71	..	..	1·49	7·95	..	1·46	46·36
Mohokhed	19	7	48·86	17·45	3·63	10·51	1·19	..	..	0·47	57·29
	20	62	55·30	24·20	4·44	12·86	1·12	..	..	0·68	64·74
		4/1	45·91	15·30			1·49	..	..	0·68	50·54
TEHSIL AKOT											
Lothkhed	21										
	22										
Sawargaon	23	No Groundnut field									
	24										
Mahamadabad	25										
	26	28/2	54·00	16·08	..	..	5·73	14·38	1·50	0·51	62·07
Jainpur Pimpri	27										
	28										
Marodi	29	No Groundnut field									
	30										

APPENDIX III—TABLE 12 (Contd.)

CROP GROUNDNUT—*Holding Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Serial No. of holding	Survey / sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implements in Rs.	Total money value in Rs.
			Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11	12
TEHSIL BALAPUR											
Pattiamrai	31	No	Ground	nut field							
	32	129	45·22	13·56	..	..	2·49	5·64	3·48	0·16	45·09
Khandala	33	60/1B	45·71	11·43	..	..	2·64	55·56	..	0·16	111·44
	34										
Manki	35										
	36										
Nagod	37	No	Ground	nut field							
	38										
Tulanga	39										
	40										
TEHSIL BASIM											
Chiwara	41										
	42	53/3	48·00	14·29	..	..	1·21	..	..	1·59	48·59
Kajalamba	43										
	44	69/5	37·25	10·06	..	..	0·53	35·25	3·61	0·42	67·17
Tapowan	45										
	46	No	Ground	nut field							
Kurha	47	25	44·60	13·10	..	..	0·75	..	3·91	0·99	57·42
	48	2/2	53·33	15·88	..	..	0·59	..	..	0·93	71·96
Krishna	49	72/1	39·01	11·25	..	..	0·71	..	5·64	0·61	49·82
	50	56	29·71	8·57	..	..	0·21	..	..	0·56	62·15
TEHSIL MANGRULPIR											
Baldeo	51	34/2	50·66	12·67	3·85	7·69	1·50		1·45	1·03	68·12
	52										
Pardi	53										
	54	No	Ground	nut field							
Pimpri Kd	55										
	56	83/1	64·00	19·06	..	..	0·44	4·44	..	0·80	74·17
Chondhi	57	18	12·00	2·95	25·71	77·14	0·36	..	..	0·37	137·25
	58	20/1	27·48	6·87	..	..	0·28	152·31	..	0·49	199·24
		20/1A	31·22	7·38	..	..	0·30	152·31	..	0·49	189·66
Mendara	59	84	63·36	15·84	..	..	1·39	..	..	0·64	41·64
	60	80	32·00	9·53	..	..	0·32	1·97	..	0·72	50·40

APPENDIX III—TABLE 12—contd.

CROP GROUNDNUT—*Field Sample*

OTHER COSTS INCLUDING MATERIALS

Village	Survey/ sub-No.	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implement in Rs.	Total money value in Rs.
		Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cart-loads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
TEHSIL AKOLA										
Masa	5	49·00	14·59	..	..	..	..	..	..	43·60
Redhawa	31	40·00	12·94	..	..	..	..	..	..	35·51
Vairatrajapur	11/3	27·43	10·29	..	..	..	..	..	..	29·55
Bhendikaji	38+39	14·01	4·61	..	..	..	..	..	..	29·24
Kaulkhed		Omitted								
		No Groundnut Field								
TEHSIL MURTIZAPUR										
Lodhipur	18/4	34·78	12·65	..	..	..	..	..	..	54·89
	9/2	24·08	8·60	..	..	..	..	..	..	59·99
Sultanpur		No Groundnut Field								
Karli	41	18·30	12·81	..	..	..	..	..	..	60·14
	28	43·33	15·17	..	..	..	..	..	..	36·25
Mohogawan	21/1	72·00	21·60	..	..	..	..	4·00	..	108·28
	54/3	50·00	15·12	..	..	..	..	..	..	87·13
Mohokhed	2/1	38·18	13·64	..	..	..	..	..	..	40·91
TEHSIL AKOT										
Lothkhed		No Groundnut Field								
Sawargaon	2/5	39·39	11·73	..	..	..	..	..	..	35·33
Mahamadabad	3	41·59	12·38	..	..	..	..	..	..	60·39
	26	22·58	6·72	..	..	..	..	..	..	52·12
Jainpur Pimpri		No Groundnut Field								
Marodi		No Groundnut Field								

APPENDIX III—TABLE 12—contd.

CROP GROUNDNUT— *Field Sample*

OTHER COSTS IINCLUDING MATERIALS

Village	Survey/ sub-No	SEED		MANURE		Rent in Rs.	Lease value in Rs.	Watch in Rs.	Implement in Rs.	Total money value in Rs.
		Quantity in lb.	Money value in Rs.	Quantity of F.Y.M. in cartloads	Money value in Rs.					
1	2	3	4	5	6	7	8	9	10	11
Tehsil Balapur										
Pattiamrai	346	58·40	13·01	..	..	..	..	..	..	38·64
Khandala	424/3	80·00	17·60	4·80	14·40	..	..	..	..	85·21
			No	Groundnut Field						
Manki	64/2	65·00	19·50	·92	2·77	..	..		..	50·64
Nagod	98/1	60·00	17·50	..	..	..	..		..	46·67
			No	Groundnut Field						
Tulanga	13/3	11·93	1·58	..	..	..	..	2·38	..	18·29
	14/2	42·84	11·00	..	..	..	..		..	37·52
Tehsil Basim										
Chiwara	33	32·00	8·62	..	..	..	..		..	39·99
	39	24·76	13·33	..	..	..	..		..	58·87
Kajalamba..	97/4	37·14	10·00	..	..	..	..	0·73	..	39·63
	66/1	32·50	8·75	2·18	6·31	..	..		..	33·36
Tapowan			No	Groundnut Field						
Kurha	10	32·27	9·66	..	..	..	..	6·44	..	45·91
	36/2	44·23	13·17	..	..	..	..	4·76	..	56·81
Krishna	13	39·00	11·25	..	..	..	..		..	43·64
	19/2	39·00	11·25	..	..	..	..	6·43	..	54·17
Tehsil Mangrulpir										
Baldeo	11	42·00	13·12	..	..	..	..	12·75	..	81·63
	15	64·80	19·30	..	..	..	..	4·94	..	73·69
Pardi	24/2	25·00	7·81	..	..	..	..	1·25	..	48·13
Pimpri Kd	33/2	28·00	9·00	..	..	..	..	6·00	..	64·88
	47	66·68	19·86	..	..	..	..	10·00	..	58·34
Chondhi	19/1	40·00	10·00	..	..	..	..		..	81·18
	13/1	48·00	11·50	1·50	4·50	..	..		..	78·27
Mendara			No	Groundnut Field						

APPENDIX IV

AREAS OF FIELDS—*Holding Sample*

Village	Serial No. of holding.	COTTON		JOWAR		GROUNDNUT	
		Survey/ Sub-No.	Area in acres.	Survey / Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.
1	2	3	4	5	6	7	8
TEHSIL AKOLA							
Masa	1	12	3.22	10/1	12.22	11/3	7.00
		42	12.12	11/3	7.60	12	2.25
		52/2	4.82	12	6.52	..	..
		2/1C	1.18	42	14.18	..	..
		37	11.30	11	12.00	..	..
	2	60/2	1.70	60/2	2.78	6	6.00
		11/3	1.00	6	12.12	..	..
Redhwa	3	9	4.00	9	8.95	..	..
	4	84/4	1.38	84/4	0.58	..	..
		86	1.50	86	1.70	..	..
Vairatrajapur	5	14/1	3.62	49/5	8.38	..	..
		40/3	3.02	14/1	3.70	..	..
		11/3	4.38	..	..	..	..
	6	48/2	1.35	23/2	2.05	..	..
		..	..	48/2	0.52	..	..
Bhendikaji	7 8	Omitted.	..	..	..	..	..
Kaulkhed	9	17/5	2.35	17/5	1.05	..	..
	10	7/2	16.00	6/2	9.98	..	..
		7/1	3.85	8/3	3.45	..	..
TEHSIL MURTIZAPUR							
Lodhipur	11	15/2	10.95	20	6.88	24/1	0.28
		10/2	1.90	1	7.30	..	..
		1	8.10	..	..	..	..
	12	10/3	3.55	24/1	6.38	10/2	1.50
		24/1	2.00	24/1A	2.62	..	..
		24/2	5.30	..	..	..	..
Sultanpur	13	14/1	2.68	118	3.95	..	..
		118	7.08	16/1	7.42	..	..
		36	11.75	..	..	..	..
		129/1	5.48	..	..	..	..
		16/3	2.30	..	..	..	..
	14	2	5.42	2	2.55	..	..
Karli	15	47/1	5.30	47/1	5.82	80	9.18
		46/2	5.18	80	7.81	..	..
		80	11.95	..	..	..	..
	16	77/1A	5.62	79	7.38	79	7.62
		17	1.18	45	13.98	45	3.52
		45	3.82	..	..	..	..
Mohogawan	17	22/1	7.60	39/1	12.00	22/1	3.65
		22/1A	7.00	23/1	13.33	..	..
		48/1	7.50	..	..	..	..
	18	28/2A	2.30	..	..	14/1A	5.12
		54/1	5.12	..	..	..	..

APPENDIX IV—*Contd.*

AREAS OF FIELDS—*Holding Sample*

Village	Serial No. of holding.	COTTON		JOWAR		GROUNDNUT	
		Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.
1	2	3	4	5	6	7	8
Mohokhed	19	21+25+26	14.58	66/12	9.00	7	14.90
		2/2	3.60	21+25+26	24.08	..	..
	20	12	7.45	24	17.55	62	20.25
		1/1	5.30	..	..	4/1	4.58
		14	21.65	..	..	..	..
TEHSIL AKOT							
Lothkhed	21	24/2	0.65	24/2	0.58	..	..
		58/4	3.10	..	..	..	..
	22	56/1A	2.35	56/1A	1.68	..	..
Sawargaon	23	51	7.00	51	5.05	..	..
		47/1	8.02	66/1	0.40	..	..
		..	..	47/1	8.02	..	..
	24	41/1+42/2	8.10	41/1+2	7.38	..	..
Mahamadabad	25	77/3	4.98	77/3	3.50	..	..
		75/1	8.90	75/1	0.90	..	..
	26	11/2	4.70	44/1	1.00	28/2	1.00
		45/1	5.85	28/2	6.38	..	..
Jainpur Pimpri	27	84/1	4.55	90/2	3.68	..	..
		40/5	1.70	44/2	10.05	..	..
		39/1	1.45	..	..	..	..
		82/2	4.18	..	..	..	..
		44/2A	6.55	..	..	..	..
		45	3.70	..	..	..	..
	28	87/1	1.22	87/1	1.52	..	..
Marodi	29	28/1	3.50	..	..	..	..
		6	13.12	..	..	..	..
		25/3	4.25	..	..	..	..
		367/3	7.35	..	..	..	..
		142/1	8.72	..	..	..	..
	30	..	..	58/2C	1.45	..	..
TEHSIL BALAPUR							
Pattiamrai	31	115/1B	2.38	..	..	..	..
		316/4+315/1A	30.01	..	..	..	..
		316/5	3.12	..	..	..	..
		347/1	4.70	..	..	..	..
	32	440+441/2	5.48	59/3	2.75	129	11.00
		..	..	..	..	60/8	0.50
Khandala	33	16/2	9.30	124/2	13.00	..	—
	34	28/1	5.00	28/2	8.00	..	..
		33	14.00	28/1	8.00	..	..
Manki	35	71/3	2.90	..	..	..	..
	36	81/1	2.20	..	..	..	..

APPENDIX IV—*Contd*

AREAS OF FIELDS—*Holding Sample*

Village	Serial No. of holding.	COTTON		JOWAR		GROUNDNUT	
		Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.
1	2	3	4	5	6	7	8
Nagod	37	55	6.50	3/2	3.25	..	..
		9/3+13	12.60	35	14.52	..	..
		23/5	7.02	47/2+48/1	23.28	..	..
		21/1+22/3	12.82	10+16	6.00	..	..
		10+16	25.38	..	..	..	..
	38	32	13.25	57/2+58/1+2	9.05	..	..
		29	5.62	2/3	2.00	..	..
		57/2+58/1+2	4.25	12	1.75	..	..
		14+15/1+4	8.85	..	..	..	..
Tulanga	39	46/1	0.92	46/1	1.68	..	..
	40	29/2	2.60	29/2	1.15	..	..
TEHSIL BASIM							
Chiwara	41	54/1	0.75	42/2	1.90	..	..
		20/1	5.55	66	5.50	..	..
		..	..	10/1	2.38	..	..
		..	..	5/1	3.38	..	..
		..	..	35/3	3.05	..	..
	42	32/1	7.00	53/3	0.75	53/3	1.25
		66	9.00	53/7	1.38	..	..
		10/1	4.12	54/1	1.05	..	..
		32/4	7.45	54/5	1.25	..	..
		..	..	20/1	1.48	..	..
Kajalamba	43	93/2	2.00	101/1	3.20	..	..
		108/1+2	5.55	108/1A	4.00	..	..
		..	..	92/4	0.98	..	..
		..	..	93/2	8.00	..	..
		..	..	108/2	3.50	..	..
	44	40/1	6.00	17/1	3.00	69/5	4.00
		68/2	6.00	32/3	3.00	..	..
Tapowan	45	1/1	2.00	11/3B	1.00	..	..
		11/3B	1.12	13	5.50	..	..
		13	5.50	..	..	..	..
	46	4/1	4.00	28	1.50	..	..
		28	1.50	56/1	3.00	..	..
		56	3.00	..	..	..	..
Kurha	47	25	11.00	23/2	4.00	25	3.50
		26	3.00	26	15.00	..	..
		23/4	4.50	..	..	..	..
	48	40/2	3.12	2/2	6.00	2/2	1.50
		34/3	1.50	..	..	..	..
Krishna	49	70	4.00	70	4.00	72/1	6.00
		6	12.00	72/1	6.00	..	..
		7	8.00	6	12.00	..	..
		..	..	7	12.00	..	..
	50	56	2.00	56	4.00	56	1.75

APPENDIX IV—*Contd.*

AREAS OF FIELDS—*Holding Sample*

Village	Serial No. of holding.	COTTON		JOWAR		GROUNDNUT	
		Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.
1	2	3	4	5	6	7	8
TEHSIL MANGRULPIR							
Baldeo	51	34/2	1.00	32/2	6.00	34/2	12.00
		1/2	2.15	10	5.00	..	..
		2	19.10	37/1	7.00	..	..
		16/4	0.50	..	..	..	..
	52	..	..	17/2	5.70	..	..
		..	..	13/1	5.85	..	..
		..	..	13/4	4.25	..	..
Pardi..	53	110	5.10	43/1	0.62	..	..
		..	..	61/3	5.72	..	..
		..	..	113/1	1.50	..	..
	54	36/3	12.40	48/4A	9.75	..	..
Pimpri Kd.	55	97/1	8.25	93	8.00	..	..
		..	..	97/1	7.00	..	..
	56	52	3.00	52	8.30	83/1	2.00
		78/3	4.00	..	..	..	..
Chondhi	57	25	16.00	16	24.00	18	14.00
		2	9.00	26	20.62	..	..
		5	16.00	17	20.00	..	..
		..	..	12	11.00	..	..
		..	..	24	20.00	..	..
	58	4/2	2.00	20/1	2.00	20/1	2.08
		..	..	20/1A	2.10	20/1A	2.00
Mendara	59	29	15.00	84	10.00	84	5.05
		31	13.08	..	..	..	..
	60	41/2	9.00	42/1	6.00	80	12.00
		42/1	5.00	134/2	3.00	..	..
		134/2	4.00	..	..	..	..

APPENDIX IV—*Contd.*

AREAS OF FIELDS—*Field Sample*

Village	COTTON		JOWAR		GROUNDNUT	
	Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.	Survey/ Sub-No.	Area in acres.
1	2	3	4	5	6	7
Tehsil Akola						
Masa	44	16.00	37	14.90	5	2.00
	11/1A	5.00	47	4.95	..	..
Redhwa	58	23.00	80/2	6.18	31	2.00
	21/2	9.00	82	15.00	11/3	4.38
Vairatrajapur	46/1	4.90	8	8.00	38+39	10.00
	23/3	5.00	30/1+2	7.00	..	..
Bhendikaji		Omitted				
Kaulkhed	15	3.52	4	3.50	..	..
	17/1	1.28	11	5.30	..	..
Tehsil Murtizapur						
Lodhipur	29/1	7.18	17/5	7.25	18/4	6.32
	5	21.92	10/1	4.48	9/2	2.32
Sultanpur	71	5.28	8	12.78	..	..
	15/2	10.40	4/1	4.00	..	..
Karli	63	24.32	28	10.65	41	15.85
	14	1.02	21	9.00	28	6.00
Mohogawan	2/1	6.00	17	4.00	21/1	2.50
	49/2	8.85	23/2	5.00	54/3	2.00
Mohokhed	20	4.00	113/2	9.00	2/1	2.20
	6/2	12.50	23	8.00	..	..
Tehsil Akot						
Lothkhed	$\frac{18}{1, C, D}+19$	28.70	$65+\frac{4}{1}$	7.00	..	..
	$\frac{50}{1}+\frac{50}{2A}$	13.22	$53+\frac{62}{2}+\frac{54}{1}$	26.28	..	..
Sawargaon	31/2	2.15	4/1	12.02	2/5	21.95
	7/4	5.00	39/2	0.78	..	..
Mahamadabad	23	4.65	85/2+3	2.20	3	3.78
	57+58/3	21.02	43/1	1.02	26	5.98
Jainpurpimpri	20	3.58	33	35.18	..	..
	55/6	1.62	64	7.00	..	..
Marodi	50	20.50	24/1	2.42	..	..
	33/3	2.70	34/3	3.60	..	..

APPENDIX IV—*Contd.*

AREAS OF FIELDS—*Field Sample*

Village	COTTON		JOWAR		GROUNDNUT	
	Survey / Sub-No.	Area in acres.	Survey / Sub-No.	Area in acres.	Survey / Sub-No.	Area in acres.
1	2	3	4	5	6	7
TEHSIL BALAPUR						
Pattiamrai	237/2	7.08	366/3	5.45	346	3.42
	242/1C	0.90	354/1A	4.87	424/3	1.25
Khandala	65/5	4.98	26/4	4.00	..	..
	17/2	4.00	133	22.00	..	..
Manki	41/4	9.85	25	12.00	64/2	2.00
	96/2	7.08	69/2	1.00	98/1	4.00
Nagod		Omitted.	8/1	2.78	..	..
			26/2	4.32	..	..
Tulanga	29/1	3.25	41	9.90	13/3	2.85
	28/2	5.45	47/1	2.45	14/2	7.00
TEHSIL BASIM						
Chiwara	1/3	0.50	101	8.75	33	3.25
	37/1A	0.70	54/7	1.95	39	2.10
Kajalamba	37/3A	2.80	92/6	3.15	97/4	3.50
	43/2A	4.10	40/4	2.92	66/1	0.50
Tapowan..	13/1	2.70	3	8.42	..	..
	10/1	1.00	2	18.00	..	..
Kurha	54	33.62	39	18.40	10	3.72
	57/2	1.58	49/1	6.80	36/2	9.50
Krishna	36/2	4.00	15	10.00	13	8.00
	24/1A	1.00	60/12	3.40	19/2	9.00
TEHSIL MANGRULPIR						
Baldeo	14	12.00	16	3.00	11	14.00
	19	20.00	31	9.00	15	20.00
Pardi	19/2A	4.00	100/1	5.00	24/2	4.00
	48/7	3.00	80/1A	3.00	..	..
Pimpri Kd	25	4.05	39	10.00	33/2	5.00
	23/1A	6.22	6/2	4.00	47	6.00
Chondhi	14	6.00	15/4	2.00	19/1	4.00
	8	9.00	24/1	4.18	13/1	4.00
Mendara	65	12.00	34/2	10.00	..	..
	3/2	0.88	42/2	10.00	..	..

ERRATA

No.	Page No.	Line.	For	Please read
1	19	Foot-Note	——	Prefix * to the foot-note.
2	60	Column 11 Last line.	Columns 12 and 13 as % column of 11	Columns 12 and 13 as % of column 11.
3	100	Columns 9 & 12 Line 8.	——	.. instead of blank
4	104	Lines 19 & 20 Lines 24 & 25	—— ——	these two lines against Serial No. 17 these two lines against Serial No. 19
5	116	Column 2	——	Figures given against Serial Nos. 41 and 42 refer to "Chiwara".
6	119	Column 3 Line 2	——	the word "omitted" in line with the figure given in column 2.
7	119	Columns 6 to 10 Lines 1 & 19	——	.. instead of blank.
8	184	Column 7 Line 35.	Figure 60/8	Figure 60/B.
9	187	Column 6 Line 20.	——	.. in line with the figures given in Line 20.
10	188	Column 6 Line 13	Figure 97/	Figure 97/4